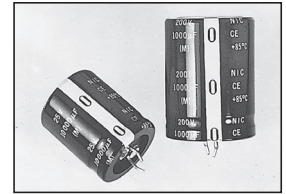


FEATURES

- LONG LIFE AT +105°C (2,000 ~ 3,000 HOURS)
- HIGH RIPPLE CURRENT
- HIGH VOLTAGE (UP TO 500VDC)
- SUITABLE FOR SWITCHING POWER SUPPLIES

**RoHS
Compliant**
includes all homogeneous materials

*See Part Number System for Details



SPECIFICATIONS

Operating Temperature Range		-40 ~ +105°C						-25 ~ +105°C						
Rated Voltage Range		10 ~ 250Vdc						315 ~ 500Vdc						
Rated Capacitance Range		220 ~ 68,000μF						39 ~ 1500μF						
Capacitance Tolerance		±20% (M)												
Max. Leakage Current (μA) After 5 minutes (20°C)		$3 \times \sqrt{C(\mu F)V}$												
Max. Tan δ at 120Hz/20°C	W.V. (Vdc)	10	16	25	35	50	63	80	100	160	180	200	220	250
	Tan δ max.	0.55	0.50	0.45	0.40	0.35	0.3	0.25	0.25	0.2	0.2	0.2	0.2	0.2
	W.V. (Vdc)	315	350	385	400	420	450	500						
	Tan δ max.	0.2	0.2	0.2	0.2	0.2	0.2	0.25						
Surge Voltage	W.V. (Vdc)	10	16	25	35	50	63	80	100	160	180	200	220	250
	S.V. (Vdc)	13	20	32	44	63	79	100	125	200	225	250	270	300
	W.V. (Vdc)	315	350	385	400	420	450	500						
	S.V. (Vdc)	365	400	435	450	470	500	550						
Ripple Current Correction Factors	Frequency (Hz)		60		120		300		500		1K		10K≤	
	Multiplier at 105°C	10 ~ 100Vdc	0.90		1.00		1.03		1.05		1.10		1.15	
		160 ~ 250Vdc	0.80		1.00		1.15		1.20		1.30		1.50	
		315 ~ 500Vdc	0.80		1.00		1.15		1.20		1.25		1.40	
Impedance Ratio (Low Temperature Stability)	Rated Voltage (VDC)		Z (-25°C)/Z (+20°C)						Z (-40°C)/Z (+20°C)					
	10 ~ 100		3 max.						12 max.					
	160 ~ 250		4 max.						15 max.					
	315 ~ 450		8 max.						-					
	500		12 max.						-					
Load Life Test 50V~100V 2,000 hours at +105°C 10V ~ 35V 3,000 hours at +105°C 160V~500V 3,000 hours at +105°C	Capacitance Change		Within ±20% of initial measured value											
	Tan δ		Less than 200% of specified maximum value											
	Leakage Current		Less than specified maximum value											
Shelf Life Test 1,000 hours at +105°C (no load)	Capacitance Change		Within ±20% of initial measured value											
	Tan δ		Less than 200% of specified maximum value											
	Leakage Current		Less than specified maximum value											
Surge Voltage Test 1000 Cycles of 30 seconds "On" and 5.5 minutes "Off" at 25°C	Capacitance Change		Within ±15% of initial measured value											
	Tan δ		Less than specified maximum value											
	Leakage Current		Less than specified maximum value											
Soldering Effect Refer to JISC5102.8.5	Capacitance Change		Within ±10% of initial measured value											
	Tan δ		Less than specified maximum value											
	Leakage Current		Less than specified maximum value											

PART NUMBER SYSTEM

NRLPW 682 M 63V 30X35 S F

Series Capacitance Code Tolerance Code Voltage Rating Case Size (mm) Lead Length RoHS compliant

S=4mm (3.5mm φ35mm Dia.)
L=6.0mm (special order)

PRECAUTIONS

Please review the notes on correct use, safety and precautions found at
<https://www.niccomp.com/resource/files/aluminum/AlumApplInfoCautions.pdf>
 If in doubt or uncertainty, please review your specific application - process details with NIC's
 technical support personnel: tpmg@niccomp.com

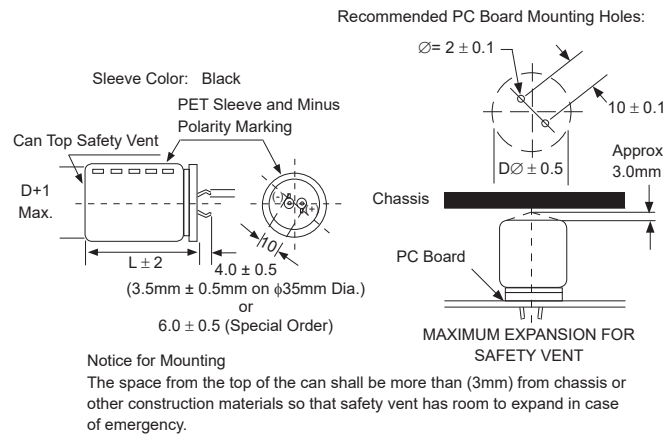
MECHANICAL CHARACTERISTICS:

1. Safety Vent:

The capacitors are provided with a pressure vent on the top of can. The vent is designed to rupture in the event that high internal gas pressure is developed by circuit malfunction or mis-use like reverse voltage.

2. Terminal Strength:

Each terminal of the capacitor shall withstand an axial pull force of 2.0Kg for a period 10 seconds or a radial bent force of 2.5Kg for a period of 30 seconds.



Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW682M10V20X25SF	10	6800	20X25	0.55	782	0.135	0.104	1.31	1.50
NRLPW822M10V20X30SF		8200	20X30	0.55	859	0.112	0.087	1.59	1.82
NRLPW103M10V20X30SF		10000	20X30	0.55	948	0.092	0.071	1.88	2.16
NRLPW103M10V22X25SF		10000	22X25	0.55	948	0.092	0.071	1.77	2.03
NRLPW123M10V20X35SF		12000	20X35	0.55	1039	0.076	0.059	2.18	2.50
NRLPW123M10V22X30SF		12000	22X30	0.55	1039	0.076	0.059	2.10	2.41
NRLPW123M10V25X25SF		12000	25X25	0.55	1039	0.076	0.059	1.94	2.23
NRLPW153M10V20X40SF		15000	20X40	0.55	1161	0.061	0.047	2.27	2.61
NRLPW153M10V22X35SF		15000	22X35	0.55	1161	0.061	0.047	2.23	2.56
NRLPW153M10V25X30SF		15000	25X30	0.55	1161	0.061	0.047	2.10	2.41
NRLPW183M10V22X40SF		18000	22X40	0.55	1272	0.051	0.040	2.41	2.77
NRLPW183M10V25X30SF		18000	25X30	0.55	1272	0.051	0.040	2.34	2.69
NRLPW183M10V30X25SF		18000	30X25	0.55	1272	0.051	0.040	2.25	2.58
NRLPW223M10V22X45SF		22000	22X45	0.55	1407	0.042	0.033	2.58	2.96
NRLPW223M10V25X35SF		22000	25X35	0.55	1407	0.042	0.033	2.54	2.92
NRLPW223M10V30X30SF		22000	30X30	0.55	1407	0.042	0.033	2.50	2.87
NRLPW273M10V22X50SF		27000	22X50	0.55	1558	0.034	0.027	3.17	3.64
NRLPW273M10V25X40SF		27000	25X40	0.55	1558	0.034	0.027	3.07	3.53
NRLPW273M10V30X30SF		27000	30X30	0.55	1558	0.034	0.027	2.95	3.39
NRLPW333M10V25X45SF		33000	25X45	0.55	1723	0.028	0.022	3.39	3.89
NRLPW333M10V30X35SF		33000	30X35	0.55	1723	0.028	0.022	3.33	3.82
NRLPW333M10V35X30SF		33000	35X30	0.55	1723	0.028	0.022	3.21	3.69
NRLPW393M10V30X40SF		39000	30X40	0.55	1873	0.024	0.019	3.70	4.25
NRLPW393M10V35X35SF		39000	35X35	0.55	1873	0.024	0.019	3.68	4.23
NRLPW473M10V30X45SF		47000	30X45	0.55	2056	0.020	0.016	4.22	4.85
NRLPW473M10V35X40SF		47000	35X40	0.55	2056	0.020	0.016	4.16	4.78
NRLPW563M10V35X45SF		56000	35X45	0.55	2244	0.017	0.014	5.00	5.75

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW682M16V20X25SF	16	6800	20X25	0.50	989	0.122	0.094	1.80	2.07
NRLPW822M16V20X30SF		8200	20X30	0.50	1086	0.102	0.079	2.08	2.39
NRLPW822M16V22X25SF		8200	22X25	0.50	1086	0.102	0.079	2.08	2.39
NRLPW103M16V20X35SF		10000	20X35	0.50	1200	0.083	0.064	2.15	2.47
NRLPW103M16V22X30SF		10000	22X30	0.50	1200	0.083	0.064	2.15	2.47
NRLPW123M16V20X40SF		12000	20X40	0.50	1314	0.070	0.054	2.31	2.65
NRLPW123M16V22X30SF		12000	22X30	0.50	1314	0.070	0.054	2.31	2.65
NRLPW123M16V25X25SF		12000	25X25	0.50	1314	0.070	0.054	2.31	2.65
NRLPW153M16V22X35SF		15000	22X35	0.50	1469	0.056	0.044	2.68	3.08
NRLPW153M16V25X30SF		15000	25X30	0.50	1469	0.056	0.044	2.68	3.08
NRLPW183M16V22X40SF		18000	22X40	0.50	1609	0.047	0.037	3.20	3.68
NRLPW183M16V25X30SF		18000	25X30	0.50	1609	0.047	0.037	3.20	3.68
NRLPW183M16V30X25SF		18000	30X25	0.50	1609	0.047	0.037	3.20	3.68
NRLPW223M16V22X45SF		22000	22X45	0.50	1779	0.038	0.030	3.36	3.86
NRLPW223M16V25X35SF		22000	25X35	0.50	1779	0.038	0.030	3.36	3.86
NRLPW223M16V30X30SF		22000	30X30	0.50	1779	0.038	0.030	3.36	3.86
NRLPW273M16V22X50SF		27000	22X50	0.50	1971	0.031	0.024	3.85	4.42
NRLPW273M16V25X40SF		27000	25X40	0.50	1971	0.031	0.024	3.85	4.42
NRLPW273M16V30X30SF		27000	30X30	0.50	1971	0.031	0.024	3.85	4.42
NRLPW333M16V25X45SF		33000	25X45	0.50	2179	0.026	0.020	4.30	4.94
NRLPW333M16V30X35SF		33000	30X35	0.50	2179	0.026	0.020	4.30	4.94
NRLPW333M16V35X30SF		33000	35X30	0.50	2179	0.026	0.020	4.30	4.94
NRLPW393M16V25X50SF		39000	25X50	0.50	2369	0.022	0.017	4.81	5.53
NRLPW393M16V30X40SF		39000	30X40	0.50	2369	0.022	0.017	4.81	5.53
NRLPW393M16V35X35SF		39000	35X35	0.50	2369	0.022	0.017	4.81	5.53
NRLPW473M16V30X45SF		47000	30X45	0.50	2601	0.018	0.014	5.53	6.35
NRLPW473M16V35X40SF		47000	35X40	0.50	2601	0.018	0.014	5.53	6.35
NRLPW563M16V30X50SF		56000	30X50	0.50	2839	0.015	0.012	6.00	6.90
NRLPW563M16V35X45SF		56000	35X45	0.50	2839	0.015	0.012	6.00	6.90
NRLPW683M16V35X50SF		68000	35X50	0.50	3129	0.013	0.010	6.40	7.36
NRLPW472M25V20X25SF	25	4700	20X25	0.45	1028	0.159	0.123	1.65	1.89
NRLPW562M25V20X30SF		5600	20X30	0.45	1122	0.134	0.104	1.85	2.12
NRLPW562M25V22X25SF		5600	22X25	0.45	1122	0.134	0.104	1.85	2.12
NRLPW682M25V20X35SF		6800	20X35	0.45	1236	0.110	0.085	2.11	2.42
NRLPW682M25V22X30SF		6800	22X30	0.45	1236	0.110	0.085	2.11	2.42
NRLPW822M25V20X40SF		8200	20X40	0.45	1358	0.091	0.070	2.34	2.69
NRLPW822M25V22X30SF		8200	22X30	0.45	1358	0.091	0.070	2.34	2.69
NRLPW822M25V25X25SF		8200	25X25	0.45	1358	0.091	0.070	2.34	2.69
NRLPW103M25V22X35SF		10000	22X35	0.45	1500	0.075	0.058	2.65	3.04
NRLPW103M25V25X30SF		10000	25X30	0.45	1500	0.075	0.058	2.65	3.04
NRLPW123M25V22X40SF		12000	22X40	0.45	1643	0.063	0.049	2.81	3.23
NRLPW123M25V25X30SF		12000	25X30	0.45	1643	0.063	0.049	2.81	3.23
NRLPW123M25V30X25SF		12000	30X25	0.45	1643	0.063	0.049	2.81	3.23
NRLPW153M25V22X45SF		15000	22X45	0.45	1837	0.050	0.039	3.13	3.59

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW153M25V25X35SF	25	15000	25X35	0.45	1837	0.050	0.039	3.13	3.59
NRLPW153M25V30X30SF		15000	30X30	0.45	1837	0.050	0.039	3.13	3.59
NRLPW183M25V25X40SF		18000	25X40	0.45	2012	0.042	0.033	3.56	4.09
NRLPW183M25V30X30SF		18000	30X30	0.45	2012	0.042	0.033	3.56	4.09
NRLPW223M25V25X50SF		22000	25X50	0.45	2224	0.034	0.027	4.04	4.64
NRLPW223M25V30X35SF		22000	30X35	0.45	2224	0.034	0.027	4.04	4.64
NRLPW223M25V35X30SF		22000	35X30	0.45	2224	0.034	0.027	4.04	4.64
NRLPW273M25V30X40SF		27000	30X40	0.45	2464	0.028	0.022	4.74	5.45
NRLPW273M25V35X35SF		27000	35X35	0.45	2464	0.028	0.022	4.74	5.45
NRLPW333M25V30X50SF		33000	30X50	0.45	2724	0.023	0.018	5.50	6.32
NRLPW333M25V35X40SF		33000	35X40	0.45	2724	0.023	0.018	5.50	6.32
NRLPW393M25V35X45SF		39000	35X45	0.45	2962	0.020	0.016	5.80	6.67
NRLPW473M25V35X50SF		47000	35X50	0.45	3251	0.016	0.013	6.30	7.24
NRLPW272M35V20X25SF	35	2700	20X25	0.4	922	0.246	0.190	1.29	1.48
NRLPW332M35V20X30SF		3300	20X30	0.4	1019	0.201	0.155	1.57	1.80
NRLPW392M35V20X30SF		3900	20X30	0.4	1108	0.171	0.132	1.78	2.04
NRLPW392M35V22X25SF		3900	22X25	0.4	1108	0.171	0.132	1.78	2.04
NRLPW472M35V20X35SF		4700	20X35	0.4	1216	0.142	0.110	2.02	2.32
NRLPW472M35V22X30SF		4700	22X30	0.4	1216	0.142	0.110	2.02	2.32
NRLPW562M35V20X40SF		5600	20X40	0.4	1328	0.119	0.092	2.13	2.44
NRLPW562M35V22X35SF		5600	22X35	0.4	1328	0.119	0.092	2.13	2.44
NRLPW562M35V25X25SF		5600	25X25	0.4	1328	0.119	0.092	2.13	2.44
NRLPW682M35V22X40SF		6800	22X40	0.4	1463	0.098	0.076	2.41	2.77
NRLPW682M35V25X30SF		6800	25X30	0.4	1463	0.098	0.076	2.41	2.77
NRLPW822M35V22X45SF		8200	22X45	0.4	1607	0.081	0.063	2.85	3.27
NRLPW822M35V25X35SF		8200	25X35	0.4	1607	0.081	0.063	2.85	3.27
NRLPW822M35V30X25SF		8200	30X25	0.4	1607	0.081	0.063	2.85	3.27
NRLPW103M35V22X50SF		10000	22X50	0.4	1774	0.067	0.052	3.05	3.50
NRLPW103M35V25X40SF		10000	25X40	0.4	1774	0.067	0.052	3.05	3.50
NRLPW103M35V30X30SF		10000	30X30	0.4	1774	0.067	0.052	3.05	3.50
NRLPW123M35V25X45SF		12000	25X45	0.4	1944	0.056	0.044	3.37	3.87
NRLPW123M35V30X35SF		12000	30X35	0.4	1944	0.056	0.044	3.37	3.87
NRLPW123M35V35X30SF		12000	35X30	0.4	1944	0.056	0.044	3.37	3.87
NRLPW153M35V25X50SF		15000	25X50	0.4	2173	0.045	0.035	3.72	4.27
NRLPW153M35V30X40SF		15000	30X40	0.4	2173	0.045	0.035	3.72	4.27
NRLPW153M35V35X35SF		15000	35X35	0.4	2173	0.045	0.035	3.72	4.27
NRLPW183M35V30X45SF		18000	30X45	0.4	2381	0.037	0.029	4.37	5.02
NRLPW183M35V35X35SF		18000	35X35	0.4	2381	0.037	0.029	4.37	5.02
NRLPW223M35V30X50SF		22000	30X50	0.4	2632	0.031	0.024	4.92	5.65
NRLPW223M35V35X40SF		22000	35X40	0.4	2632	0.031	0.024	4.92	5.65
NRLPW273M35V35X50SF		27000	35X50	0.4	2916	0.025	0.020	5.30	6.09
NRLPW222M50V20X25SF	50	2200	20X25	0.35	994	0.264	0.204	1.60	1.84
NRLPW272M50V20X30SF		2700	20X30	0.35	1102	0.215	0.166	1.73	1.98
NRLPW272M50V22X25SF		2700	22X25	0.35	1102	0.215	0.166	1.73	1.98

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW332M50V20X35SF	50	3300	20X35	0.35	1218	0.176	0.136	1.97	2.26
NRLPW332M50V22X30SF		3300	22X30	0.35	1218	0.176	0.136	1.97	2.26
NRLPW392M50V20X40SF		3900	20X40	0.35	1324	0.149	0.115	2.22	2.55
NRLPW392M50V22X35SF		3900	22X35	0.35	1324	0.149	0.115	2.22	2.55
NRLPW392M50V25X25SF		3900	25X25	0.35	1324	0.149	0.115	2.22	2.55
NRLPW472M50V20X45SF		4700	20X45	0.35	1454	0.124	0.096	2.43	2.79
NRLPW472M50V22X40SF		4700	22X40	0.35	1454	0.124	0.096	2.43	2.79
NRLPW472M50V25X30SF		4700	25X30	0.35	1454	0.124	0.096	2.43	2.79
NRLPW562M50V22X45SF		5600	22X45	0.35	1587	0.104	0.080	2.75	3.16
NRLPW562M50V25X35SF		5600	25X35	0.35	1587	0.104	0.080	2.75	3.16
NRLPW562M50V30X25SF		5600	30X25	0.35	1587	0.104	0.080	2.75	3.16
NRLPW682M50V22X50SF		6800	22X50	0.35	1749	0.086	0.067	3.30	3.79
NRLPW682M50V25X40SF		6800	25X40	0.35	1749	0.086	0.067	3.30	3.79
NRLPW682M50V30X30SF		6800	30X30	0.35	1749	0.086	0.067	3.30	3.79
NRLPW682M50V35X25SF		6800	35X25	0.35	1749	0.086	0.067	3.30	3.79
NRLPW822M50V25X45SF		8200	25X45	0.35	1920	0.071	0.055	3.60	4.14
NRLPW822M50V30X35SF		8200	30X35	0.35	1920	0.071	0.055	3.60	4.14
NRLPW822M50V35X30SF		8200	35X30	0.35	1920	0.071	0.055	3.60	4.14
NRLPW103M50V25X50SF		10000	25X50	0.35	2121	0.059	0.046	4.05	4.65
NRLPW103M50V30X40SF		10000	30X40	0.35	2121	0.059	0.046	4.05	4.65
NRLPW103M50V35X30SF		10000	35X30	0.35	2121	0.059	0.046	4.05	4.65
NRLPW123M50V30X45SF		12000	30X45	0.35	2323	0.049	0.038	4.56	5.24
NRLPW123M50V35X35SF		12000	35X35	0.35	2323	0.049	0.038	4.56	5.24
NRLPW153M50V30X50SF		15000	30X50	0.35	2598	0.039	0.030	4.77	5.48
NRLPW153M50V35X40SF		15000	35X40	0.35	2598	0.039	0.030	4.77	5.48
NRLPW152M63V20X25SF	63	1500	20X25	0.3	922	0.332	0.256	1.47	1.69
NRLPW182M63V20X30SF		1800	20X30	0.3	1010	0.277	0.214	1.58	1.81
NRLPW222M63V20X35SF		2200	20X35	0.3	1116	0.227	0.175	1.82	2.09
NRLPW272M63V22X30SF		2700	22X30	0.3	1237	0.185	0.143	2.11	2.42
NRLPW272M63V25X25SF		2700	25X25	0.3	1237	0.185	0.143	2.11	2.42
NRLPW332M63V22X35SF		3300	22X35	0.3	1367	0.151	0.117	2.33	2.67
NRLPW332M63V25X30SF		3300	25X30	0.3	1367	0.151	0.117	2.33	2.67
NRLPW392M63V22X40SF		3900	22X40	0.3	1487	0.128	0.099	2.55	2.93
NRLPW392M63V25X30SF		3900	25X30	0.3	1487	0.128	0.099	2.55	2.93
NRLPW392M63V30X25SF		3900	30X25	0.3	1487	0.128	0.099	2.55	2.93
NRLPW472M63V22X45SF		4700	22X45	0.3	1632	0.106	0.082	2.97	3.41
NRLPW472M63V25X35SF		4700	25X35	0.3	1632	0.106	0.082	2.97	3.41
NRLPW472M63V30X30SF		4700	30X30	0.3	1632	0.106	0.082	2.97	3.41
NRLPW562M63V25X40SF		5600	25X40	0.3	1781	0.089	0.069	3.22	3.70
NRLPW562M63V30X30SF		5600	30X30	0.3	1781	0.089	0.069	3.22	3.70
NRLPW562M63V35X25SF		5600	35X25	0.3	1781	0.089	0.069	3.22	3.70
NRLPW682M63V25X45SF		6800	25X45	0.3	1963	0.074	0.057	3.65	4.19
NRLPW682M63V30X35SF		6800	30X35	0.3	1963	0.074	0.057	3.65	4.19
NRLPW682M63V35X30SF		6800	35X30	0.3	1963	0.074	0.057	3.65	4.19

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW822M63V30X40SF	63	8200	30X40	0.3	2156	0.061	0.047	4.04	4.64
NRLPW822M63V35X35SF		8200	35X35	0.3	2156	0.061	0.047	4.04	4.64
NRLPW103M63V30X45SF		10000	30X45	0.3	2381	0.050	0.039	4.48	5.15
NRLPW103M63V35X40SF		10000	35X40	0.3	2381	0.050	0.039	4.48	5.15
NRLPW123M63V35X45SF		12000	35X45	0.3	2608	0.042	0.033	4.75	5.46
NRLPW153M63V35X50SF		15000	35X50	0.3	2916	0.034	0.027	5.25	6.03
NRLPW102M80V20X25SF	80	1000	20X25	0.25	848	0.415	0.320	1.24	1.42
NRLPW122M80V20X30SF		1200	20X30	0.25	929	0.346	0.267	1.44	1.65
NRLPW122M80V22X25SF		1200	22X25	0.25	929	0.346	0.267	1.44	1.65
NRLPW152M80V20X30SF		1500	20X30	0.25	1039	0.277	0.214	1.59	1.82
NRLPW152M80V22X30SF		1500	22X30	0.25	1039	0.277	0.214	1.59	1.82
NRLPW182M80V20X35SF		1800	20X35	0.25	1138	0.231	0.178	1.79	2.05
NRLPW182M80V22X30SF		1800	22X30	0.25	1138	0.231	0.178	1.79	2.05
NRLPW182M80V25X25SF		1800	25X25	0.25	1138	0.231	0.178	1.79	2.05
NRLPW222M80V20X40SF		2200	20X40	0.25	1258	0.189	0.146	2.03	2.33
NRLPW222M80V22X35SF		2200	22X35	0.25	1258	0.189	0.146	2.03	2.33
NRLPW222M80V25X30SF		2200	25X30	0.25	1258	0.189	0.146	2.03	2.33
NRLPW272M80V22X40SF		2700	22X40	0.25	1394	0.154	0.119	2.39	2.74
NRLPW272M80V25X35SF		2700	25X35	0.25	1394	0.154	0.119	2.39	2.74
NRLPW272M80V30X25SF		2700	30X25	0.25	1394	0.154	0.119	2.39	2.74
NRLPW332M80V22X50SF		3300	22X50	0.25	1541	0.126	0.097	2.64	3.03
NRLPW332M80V25X40SF		3300	25X40	0.25	1541	0.126	0.097	2.64	3.03
NRLPW332M80V30X30SF		3300	30X30	0.25	1541	0.126	0.097	2.64	3.03
NRLPW332M80V35X25SF		3300	35X25	0.25	1541	0.126	0.097	2.64	3.03
NRLPW392M80V25X45SF		3900	25X45	0.25	1675	0.107	0.083	2.97	3.41
NRLPW392M80V30X30SF		3900	30X30	0.25	1675	0.107	0.083	2.97	3.41
NRLPW392M80V35X30SF		3900	35X30	0.25	1675	0.107	0.083	2.97	3.41
NRLPW472M80V25X50SF		4700	25X50	0.25	1839	0.089	0.069	3.38	3.88
NRLPW472M80V30X35SF		4700	30X35	0.25	1839	0.089	0.069	3.38	3.88
NRLPW472M80V35X30SF		4700	35X30	0.25	1839	0.089	0.069	3.38	3.88
NRLPW562M80V30X40SF		5600	30X40	0.25	2007	0.075	0.058	3.80	4.37
NRLPW562M80V35X35SF		5600	35X35	0.25	2007	0.075	0.058	3.80	4.37
NRLPW682M80V30X50SF		6800	30X50	0.25	2212	0.061	0.047	4.10	4.71
NRLPW682M80V35X40SF		6800	35X40	0.25	2212	0.061	0.047	4.10	4.71
NRLPW822M80V35X45SF		8200	35X45	0.25	2429	0.051	0.040	4.30	4.94
NRLPW681M100V20X25SF	100	680	20X25	0.25	782	0.610	0.470	1.15	1.32
NRLPW821M100V20X30SF		820	20X30	0.25	859	0.506	0.390	1.32	1.51
NRLPW821M100V22X25SF		820	22X25	0.25	859	0.506	0.390	1.32	1.51
NRLPW102M100V20X30SF		1000	20X30	0.25	948	0.415	0.320	1.47	1.69
NRLPW102M100V22X30SF		1000	22X30	0.25	948	0.415	0.320	1.47	1.69
NRLPW122M100V20X35SF		1200	20X35	0.25	1039	0.346	0.267	1.69	1.94
NRLPW122M100V22X30SF		1200	22X30	0.25	1039	0.346	0.267	1.69	1.94
NRLPW122M100V25X25SF		1200	25X25	0.25	1039	0.346	0.267	1.69	1.94
NRLPW152M100V22X35SF		1500	22X35	0.25	1161	0.277	0.214	1.98	2.27

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW152M100V25X30SF	100	1500	25X30	0.25	1161	0.277	0.214	1.98	2.27
NRLPW182M100V22X40SF		1800	22X40	0.25	1272	0.231	0.178	2.23	2.56
NRLPW182M100V25X35SF		1800	25X35	0.25	1272	0.231	0.178	2.23	2.56
NRLPW182M100V30X25SF		1800	30X25	0.25	1272	0.231	0.178	2.23	2.56
NRLPW222M100V25X40SF		2200	25X40	0.25	1407	0.189	0.146	2.55	2.93
NRLPW222M100V30X30SF		2200	30X30	0.25	1407	0.189	0.146	2.55	2.93
NRLPW222M100V35X25SF		2200	35X25	0.25	1407	0.189	0.146	2.55	2.93
NRLPW272M100V25X45SF		2700	25X45	0.25	1558	0.154	0.119	2.89	3.32
NRLPW272M100V30X35SF		2700	30X35	0.25	1558	0.154	0.119	2.89	3.32
NRLPW272M100V35X30SF		2700	35X30	0.25	1558	0.154	0.119	2.89	3.32
NRLPW332M100V25X50SF		3300	25X50	0.25	1723	0.126	0.097	3.30	3.79
NRLPW332M100V30X40SF		3300	30X40	0.25	1723	0.126	0.097	3.30	3.79
NRLPW332M100V35X35SF		3300	35X35	0.25	1723	0.126	0.097	3.30	3.79
NRLPW392M100V30X45SF		3900	30X45	0.25	1873	0.107	0.083	3.67	4.22
NRLPW392M100V35X35SF		3900	35X35	0.25	1873	0.107	0.083	3.67	4.22
NRLPW472M100V30X50SF		4700	30X50	0.25	2056	0.089	0.069	3.80	4.37
NRLPW472M100V35X40SF		4700	35X40	0.25	2056	0.089	0.069	3.80	4.37
NRLPW562M100V35X45SF		5600	35X45	0.25	2244	0.075	0.058	4.05	4.65
NRLPW331M160V20X25SF	160	330	20X25	0.2	689	1.005	0.774	1.32	1.98
NRLPW391M160V20X25SF		390	20X25	0.2	749	0.851	0.655	1.39	2.08
NRLPW471M160V20X30SF		470	20X30	0.2	822	0.706	0.544	1.62	2.43
NRLPW471M160V22X25SF		470	22X25	0.2	822	0.706	0.544	1.51	2.26
NRLPW561M160V20X35SF		560	20X35	0.2	897	0.593	0.457	1.85	2.77
NRLPW561M160V22X30SF		560	22X30	0.2	897	0.593	0.457	1.75	2.62
NRLPW681M160V20X40SF		680	20X40	0.2	989	0.488	0.376	2.09	3.13
NRLPW681M160V22X30SF		680	22X30	0.2	989	0.488	0.376	1.83	2.74
NRLPW681M160V25X25SF		680	25X25	0.2	989	0.488	0.376	1.70	2.55
NRLPW821M160V20X50SF		820	20X50	0.2	1086	0.405	0.312	2.47	3.70
NRLPW821M160V22X35SF		820	22X35	0.2	1086	0.405	0.312	2.10	3.15
NRLPW821M160V25X30SF		820	25X30	0.2	1086	0.405	0.312	2.00	3.00
NRLPW102M160V22X40SF		1000	22X40	0.2	1200	0.332	0.256	2.37	3.55
NRLPW102M160V25X35SF		1000	25X35	0.2	1200	0.332	0.256	2.20	3.30
NRLPW102M160V30X25SF		1000	30X25	0.2	1200	0.332	0.256	2.20	3.30
NRLPW122M160V22X55SF		1200	22X55	0.2	1314	0.277	0.214	2.98	4.47
NRLPW122M160V25X40SF		1200	25X40	0.2	1314	0.277	0.214	2.50	3.75
NRLPW122M160V30X30SF		1200	30X30	0.2	1314	0.277	0.214	2.30	3.45
NRLPW122M160V35X25SF		1200	35X25	0.2	1314	0.277	0.214	2.30	3.45
NRLPW152M160V25X45SF		1500	25X45	0.2	1469	0.222	0.171	2.80	4.20
NRLPW152M160V30X35SF		1500	30X35	0.2	1469	0.222	0.171	2.50	3.75
NRLPW152M160V35X30SF		1500	35X30	0.2	1469	0.222	0.171	2.50	3.75
NRLPW182M160V25X60SF		1800	25X60	0.2	1609	0.185	0.143	3.43	5.14
NRLPW182M160V30X40SF		1800	30X40	0.2	1609	0.185	0.143	2.70	4.05
NRLPW182M160V35X35SF		1800	35X35	0.2	1609	0.185	0.143	2.70	4.05
NRLPW222M160V30X45SF		2200	30X45	0.2	1779	0.151	0.117	2.90	4.35

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW222M160V35X40SF	160	2200	35X40	0.2	1779	0.151	0.117	2.90	4.35
NRLPW272M160V30X60SF		2700	30X60	0.2	1971	0.123	0.095	3.58	5.37
NRLPW272M160V35X45SF		2700	35X45	0.2	1971	0.123	0.095	3.10	4.65
NRLPW332M160V35X55SF		3300	35X55	0.2	2179	0.101	0.078	3.24	4.86
NRLPW331M180V20X25SF	180	330	20X25	0.2	731	1.005	0.774	1.32	1.98
NRLPW391M180V20X30SF		390	20X30	0.2	794	0.851	0.655	1.53	2.29
NRLPW391M180V22X25SF		390	22X25	0.2	794	0.851	0.655	1.43	2.14
NRLPW471M180V20X35SF		470	20X35	0.2	872	0.706	0.544	1.75	2.62
NRLPW471M180V22X30SF		470	22X30	0.2	872	0.706	0.544	1.67	2.5
NRLPW561M180V20X40SF		560	20X40	0.2	952	0.593	0.457	1.98	2.97
NRLPW561M180V22X30SF		560	22X30	0.2	952	0.593	0.457	1.75	2.62
NRLPW561M180V25X25SF		560	25X25	0.2	952	0.593	0.457	1.59	2.38
NRLPW681M180V20X45SF		680	20X45	0.2	1049	0.488	0.376	2.22	3.33
NRLPW681M180V22X35SF		680	22X35	0.2	1049	0.488	0.376	2.01	3.01
NRLPW681M180V25X30SF		680	25X30	0.2	1049	0.488	0.376	1.86	2.79
NRLPW821M180V22X40SF		820	22X40	0.2	1152	0.405	0.312	2.27	3.40
NRLPW821M180V25X35SF		820	25X35	0.2	1152	0.405	0.312	2.14	3.21
NRLPW821M180V30X25SF		820	30X25	0.2	1152	0.405	0.312	2.00	3.00
NRLPW102M180V22X50SF		1000	22X50	0.2	1272	0.332	0.256	2.68	4.02
NRLPW102M180V25X40SF		1000	25X40	0.2	1272	0.332	0.256	2.40	3.60
NRLPW102M180V30X30SF		1000	30X30	0.2	1272	0.332	0.256	2.20	3.30
NRLPW102M180V35X25SF		1000	35X25	0.2	1272	0.332	0.256	2.20	3.30
NRLPW122M180V22X60SF		1200	22X60	0.2	1394	0.277	0.214	3.09	4.63
NRLPW122M180V25X45SF		1200	25X45	0.2	1394	0.277	0.214	2.67	4.00
NRLPW122M180V30X35SF		1200	30X35	0.2	1394	0.277	0.214	2.30	3.45
NRLPW122M180V35X30SF		1200	35X30	0.2	1394	0.277	0.214	2.30	3.45
NRLPW152M180V25X50SF		1500	25X50	0.2	1558	0.222	0.171	2.99	4.48
NRLPW152M180V30X40SF		1500	30X40	0.2	1558	0.222	0.171	2.54	3.81
NRLPW152M180V35X30SF		1500	35X30	0.2	1558	0.222	0.171	2.50	3.75
NRLPW182M180V30X45SF		1800	30X45	0.2	1707	0.185	0.143	2.79	4.18
NRLPW182M180V35X35SF		1800	35X35	0.2	1707	0.185	0.143	2.70	4.05
NRLPW222M180V30X50SF		2200	30X50	0.2	1887	0.151	0.117	3.12	4.68
NRLPW222M180V35X40SF		2200	35X40	0.2	1887	0.151	0.117	2.90	4.35
NRLPW272M180V35X50SF		2700	35X50	0.2	2091	0.123	0.095	3.10	4.65
NRLPW332M180V35X60SF		3300	35X60	0.2	2312	0.101	0.078	3.44	5.16
NRLPW271M200V20X25SF	200	270	20X25	0.2	697	1.229	0.946	1.25	1.87
NRLPW331M200V20X30SF		330	20X30	0.2	770	1.005	0.774	1.46	2.19
NRLPW331M200V22X25SF		330	22X25	0.2	770	1.005	0.774	1.37	2.05
NRLPW391M200V20X30SF		390	20X30	0.2	837	0.851	0.655	1.54	2.31
NRLPW391M200V22X25SF		390	22X25	0.2	837	0.851	0.655	1.44	2.16
NRLPW471M200V20X35SF		470	20X35	0.2	919	0.706	0.544	1.76	2.64
NRLPW471M200V22X30SF		470	22X30	0.2	919	0.706	0.544	1.67	2.50
NRLPW471M200V25X25SF		470	25X25	0.2	919	0.706	0.544	1.53	2.29
NRLPW561M200V20X40SF		560	20X40	0.2	1003	0.593	0.457	1.98	2.97

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW561M200V22X35SF	200	560	22X35	0.2	1003	0.593	0.457	1.90	2.85
NRLPW561M200V25X25SF		560	25X25	0.2	1003	0.593	0.457	1.60	2.40
NRLPW681M200V20X50SF		680	20X50	0.2	1106	0.488	0.376	2.34	3.51
NRLPW681M200V22X40SF		680	22X40	0.2	1106	0.488	0.376	2.15	3.22
NRLPW681M200V25X30SF		680	25X30	0.2	1106	0.488	0.376	1.85	2.77
NRLPW681M200V30X25SF		680	30X25	0.2	1106	0.488	0.376	1.75	2.62
NRLPW821M200V22X45SF		820	22X45	0.2	1214	0.405	0.312	2.41	3.61
NRLPW821M200V25X35SF		820	25X35	0.2	1214	0.405	0.312	2.12	3.18
NRLPW821M200V30X25SF		820	30X25	0.2	1214	0.405	0.312	2.04	3.06
NRLPW102M200V22X55SF		1000	22X55	0.2	1341	0.332	0.256	2.84	4.26
NRLPW102M200V25X45SF		1000	25X45	0.2	1341	0.332	0.256	2.58	3.87
NRLPW102M200V30X30SF		1000	30X30	0.2	1341	0.332	0.256	2.30	3.45
NRLPW122M200V25X50SF		1200	25X50	0.2	1469	0.277	0.214	2.84	4.26
NRLPW122M200V30X35SF		1200	30X35	0.2	1469	0.277	0.214	2.65	3.97
NRLPW122M200V35X30SF		1200	35X30	0.2	1469	0.277	0.214	2.65	3.97
NRLPW152M200V25X60SF		1500	25X60	0.2	1643	0.222	0.171	3.28	4.92
NRLPW152M200V30X45SF		1500	30X45	0.2	1643	0.222	0.171	2.80	4.20
NRLPW152M200V35X35SF		1500	35X35	0.2	1643	0.222	0.171	2.80	4.20
NRLPW182M200V30X50SF		1800	30X50	0.2	1800	0.185	0.143	3.08	4.62
NRLPW182M200V35X40SF		1800	35X40	0.2	1800	0.185	0.143	3.08	4.62
NRLPW222M200V30X60SF		2200	30X60	0.2	1989	0.151	0.117	3.45	5.17
NRLPW222M200V35X45SF		2200	35X45	0.2	1989	0.151	0.117	3.48	5.22
NRLPW272M200V35X55SF		2700	35X55	0.2	1989	0.123	0.095	4.05	6.07
NRLPW221M220V20X25SF	220	220	20X25	0.2	660	1.508	1.160	1.17	1.75
NRLPW271M220V20X30SF		270	20X30	0.2	731	1.229	0.946	1.36	2.04
NRLPW271M220V22X25SF		270	22X25	0.2	731	1.229	0.946	1.29	1.93
NRLPW331M220V20X30SF		330	20X30	0.2	808	1.005	0.774	1.46	2.19
NRLPW331M220V22X25SF		330	22X25	0.2	808	1.005	0.774	1.37	2.05
NRLPW391M220V20X35SF		390	20X35	0.2	878	0.851	0.655	1.66	2.49
NRLPW391M220V22X30SF		390	22X30	0.2	878	0.851	0.655	1.58	2.37
NRLPW391M220V25X25SF		390	25X25	0.2	878	0.851	0.655	1.46	2.19
NRLPW471M220V20X40SF		470	20X40	0.2	964	0.706	0.544	1.87	2.80
NRLPW471M220V22X35SF		470	22X35	0.2	964	0.706	0.544	1.81	2.71
NRLPW471M220V25X25SF		470	25X25	0.2	964	0.706	0.544	1.53	2.29
NRLPW561M220V20X45SF		560	20X45	0.2	1052	0.593	0.457	2.09	3.13
NRLPW561M220V22X40SF		560	22X40	0.2	1052	0.593	0.457	2.04	3.06
NRLPW561M220V25X30SF		560	25X30	0.2	1052	0.593	0.457	1.79	2.68
NRLPW561M220V30X25SF		560	30X25	0.2	1052	0.593	0.457	1.61	2.41
NRLPW681M220V22X45SF		680	22X45	0.2	1160	0.488	0.376	2.29	3.43
NRLPW681M220V25X35SF		680	25X35	0.2	1160	0.488	0.376	2.05	3.07
NRLPW681M220V30X25SF		680	30X25	0.2	1160	0.488	0.376	1.78	2.67
NRLPW821M220V22X50SF		820	22X50	0.2	1274	0.405	0.312	2.54	3.81
NRLPW821M220V25X40SF		820	25X40	0.2	1274	0.405	0.312	2.31	3.46
NRLPW821M220V30X30SF		820	30X30	0.2	1274	0.405	0.312	1.93	2.89

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW821M220V35X25SF	220	820	35X25	0.2	1274	0.405	0.312	1.93	2.89
NRLPW102M220V25X50SF		1000	25X50	0.2	1407	0.332	0.256	2.72	4.08
NRLPW102M220V30X35SF		1000	30X35	0.2	1407	0.332	0.256	2.33	3.49
NRLPW102M220V35X30SF		1000	35X30	0.2	1407	0.332	0.256	2.33	3.49
NRLPW122M220V25X55SF		1200	25X55	0.2	1541	0.277	0.214	2.96	4.44
NRLPW122M220V30X40SF		1200	30X40	0.2	1541	0.277	0.214	2.50	3.75
NRLPW122M220V35X35SF		1200	35X35	0.2	1541	0.277	0.214	2.50	3.75
NRLPW152M220V30X50SF		1500	30X50	0.2	1723	0.222	0.171	2.92	4.38
NRLPW152M220V35X40SF		1500	35X40	0.2	1723	0.222	0.171	2.76	4.14
NRLPW182M220V30X60SF		1800	30X60	0.2	1887	0.185	0.143	3.38	5.07
NRLPW182M220V35X45SF		1800	35X45	0.2	1887	0.185	0.143	3.11	4.66
NRLPW222M220V35X55SF		2200	35X55	0.2	2087	0.151	0.117	3.67	5.50
NRLPW221M250V20X25SF	250	220	20X25	0.2	703	1.508	1.160	1.17	1.75
NRLPW271M250V20X30SF		270	20X30	0.2	779	1.229	0.946	1.36	2.04
NRLPW271M250V22X25SF		270	22X25	0.2	779	1.229	0.946	1.30	1.95
NRLPW331M250V20X35SF		330	20X35	0.2	861	1.005	0.774	1.57	2.35
NRLPW331M250V22X30SF		330	22X30	0.2	861	1.005	0.774	1.51	2.26
NRLPW331M250V25X25SF		330	25X25	0.2	861	1.005	0.774	1.41	2.11
NRLPW391M250V20X40SF		390	20X40	0.2	936	0.851	0.655	1.76	2.64
NRLPW391M250V22X35SF		390	22X35	0.2	936	0.851	0.655	1.71	2.56
NRLPW391M250V25X25SF		390	25X25	0.2	936	0.851	0.655	1.47	2.20
NRLPW471M250V20X45SF		470	20X45	0.2	1028	0.706	0.544	1.98	2.97
NRLPW471M250V22X40SF		470	22X40	0.2	1028	0.706	0.544	1.94	2.91
NRLPW471M250V25X30SF		470	25X30	0.2	1028	0.706	0.544	1.71	2.56
NRLPW471M250V30X25SF		470	30X25	0.2	1028	0.706	0.544	1.57	2.35
NRLPW561M250V22X45SF		560	22X45	0.2	1122	0.593	0.457	2.16	3.24
NRLPW561M250V25X35SF		560	25X35	0.2	1122	0.593	0.457	1.95	2.92
NRLPW561M250V30X25SF		560	30X25	0.2	1122	0.593	0.457	1.60	2.40
NRLPW681M250V22X50SF		680	22X50	0.2	1236	0.488	0.376	2.40	3.60
NRLPW681M250V25X40SF		680	25X40	0.2	1236	0.488	0.376	2.20	3.30
NRLPW681M250V30X30SF		680	30X30	0.2	1236	0.488	0.376	1.87	2.80
NRLPW681M250V35X25SF		680	35X25	0.2	1236	0.488	0.376	1.70	2.55
NRLPW821M250V22X60SF		820	22X60	0.2	1358	0.405	0.312	2.77	4.15
NRLPW821M250V25X45SF		820	25X45	0.2	1358	0.405	0.312	2.45	3.67
NRLPW821M250V30X35SF		820	30X35	0.2	1358	0.405	0.312	2.14	3.21
NRLPW821M250V35X30SF		820	35X30	0.2	1358	0.405	0.312	2.00	3.00
NRLPW102M250V25X55SF		1000	25X55	0.2	1500	0.332	0.256	2.87	4.30
NRLPW102M250V30X40SF		1000	30X40	0.2	1500	0.332	0.256	2.40	3.60
NRLPW102M250V35X35SF		1000	35X35	0.2	1500	0.332	0.256	2.20	3.30
NRLPW122M250V30X45SF		1200	30X45	0.2	1643	0.277	0.214	2.65	3.97
NRLPW122M250V35X35SF		1200	35X35	0.2	1643	0.277	0.214	2.30	3.45
NRLPW152M250V30X55SF		1500	30X55	0.2	1837	0.222	0.171	3.12	4.68
NRLPW152M250V35X45SF		1500	35X45	0.2	1837	0.222	0.171	2.67	4.00
NRLPW182M250V35X50SF		1800	35X50	0.2	2012	0.185	0.143	2.89	4.33
NRLPW222M250V35X60SF		2200	35X60	0.2	2224	0.151	0.117	3.32	4.98



Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW121M315V20X25SF	315	120	20X25	0.2	583	2.764	2.127	0.86	1.20
NRLPW151M315V20X30SF		150	20X30	0.2	652	2.211	1.701	1.00	1.40
NRLPW151M315V22X25SF		150	22X25	0.2	652	2.211	1.701	0.98	1.37
NRLPW181M315V20X35SF		180	20X35	0.2	714	1.843	1.418	1.14	1.59
NRLPW181M315V22X30SF		180	22X30	0.2	714	1.843	1.418	1.13	1.58
NRLPW221M315V20X40SF		220	20X40	0.2	789	1.508	1.16	1.30	1.82
NRLPW221M315V22X30SF		220	22X30	0.2	789	1.508	1.16	1.22	1.70
NRLPW221M315V25X25SF		220	25X25	0.2	789	1.508	1.160	1.17	1.63
NRLPW271M315V20X45SF		270	20X45	0.2	874	1.229	0.946	1.48	2.07
NRLPW271M315V22X35SF		270	22X35	0.2	874	1.229	0.946	1.40	1.96
NRLPW271M315V25X30SF		270	25X30	0.2	874	1.229	0.946	1.37	1.91
NRLPW331M315V20X50SF		330	20X50	0.2	967	1.005	0.774	1.67	2.33
NRLPW331M315V22X40SF		330	22X40	0.2	967	1.005	0.774	1.59	2.22
NRLPW331M315V25X35SF		330	25X35	0.2	967	1.005	0.774	1.56	2.18
NRLPW331M315V30X25SF		330	30X25	0.2	967	1.005	0.774	1.38	1.93
NRLPW391M315V22X50SF		390	22X50	0.2	1051	0.851	0.655	1.84	2.57
NRLPW391M315V25X35SF		390	25X35	0.2	1051	0.851	0.655	1.65	2.31
NRLPW391M315V30X30SF		390	30X30	0.2	1051	0.851	0.655	1.60	2.24
NRLPW391M315V35X25SF		390	35X25	0.2	1051	0.851	0.655	1.44	2.01
NRLPW471M315V22X55SF		470	22X55	0.2	1154	0.706	0.544	2.05	2.87
NRLPW471M315V25X45SF		470	25X45	0.2	1154	0.706	0.544	1.96	2.74
NRLPW471M315V30X35SF		470	30X35	0.2	1154	0.706	0.544	1.83	2.56
NRLPW471M315V35X30SF		470	35X30	0.2	1154	0.706	0.544	1.71	2.39
NRLPW561M315V25X50SF		560	25X50	0.2	1260	0.593	0.457	2.17	3.03
NRLPW561M315V30X35SF		560	30X35	0.2	1260	0.593	0.457	1.89	2.64
NRLPW561M315V35X30SF		560	35X30	0.2	1260	0.593	0.457	1.72	2.40
NRLPW681M315V25X55SF		680	25X55	0.2	1388	0.488	0.376	2.41	3.37
NRLPW681M315V30X40SF		680	30X40	0.2	1388	0.488	0.376	2.12	2.96
NRLPW681M315V35X35SF		680	35X35	0.2	1388	0.488	0.376	1.98	2.77
NRLPW821M315V30X50SF		820	30X50	0.2	1524	0.405	0.312	2.51	3.51
NRLPW821M315V35X40SF		820	35X40	0.2	1524	0.405	0.312	2.22	3.1
NRLPW102M315V30X55SF		1000	30X55	0.2	1683	0.332	0.256	2.75	3.85
NRLPW102M315V35X45SF		1000	35X45	0.2	1683	0.332	0.256	2.45	3.43
NRLPW122M315V35X50SF		1200	35X50	0.2	1844	0.277	0.214	2.67	3.73
NRLPW152M315V35X60SF		1500	35X60	0.2	2062	0.222	0.171	3.08	4.31
NRLPW101M350V20X25SF	350	100	20X25	0.2	561	3.316	2.551	0.81	1.13
NRLPW121M350V20X30SF		120	20X30	0.2	614	2.764	2.127	0.93	1.30
NRLPW121M350V22X25SF		120	22X25	0.2	614	2.764	2.127	0.91	1.27
NRLPW151M350V20X35SF		150	20X35	0.2	687	2.211	1.701	1.08	1.51
NRLPW151M350V22X30SF		150	22X30	0.2	687	2.211	1.701	1.06	1.48
NRLPW181M350V20X40SF		180	20X40	0.2	752	1.843	1.418	1.22	1.70
NRLPW181M350V22X30SF		180	22X30	0.2	752	1.843	1.418	1.14	1.59
NRLPW181M350V25X25SF		180	25X25	0.2	752	1.843	1.418	1.10	1.54

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW221M350V20X45SF	350	220	20X45	0.2	832	1.508	1.160	1.38	1.93
NRLPW221M350V22X35SF		220	22X35	0.2	832	1.508	1.160	1.31	1.83
NRLPW221M350V25X30SF		220	25X30	0.2	832	1.508	1.160	1.28	1.79
NRLPW271M350V20X50SF		270	20X50	0.2	922	1.229	0.946	1.56	2.18
NRLPW271M350V22X45SF		270	22X45	0.2	922	1.229	0.946	1.55	2.17
NRLPW271M350V25X35SF		270	25X35	0.2	922	1.229	0.946	1.47	2.05
NRLPW271M350V30X25SF		270	30X25	0.2	922	1.229	0.946	1.31	1.83
NRLPW331M350V22X50SF		330	22X50	0.2	1019	1.005	0.774	1.75	2.45
NRLPW331M350V25X40SF		330	25X40	0.2	1019	1.005	0.774	1.67	2.33
NRLPW331M350V30X30SF		330	30X30	0.2	1019	1.005	0.774	1.53	2.14
NRLPW331M350V35X25SF		330	35X25	0.2	1019	1.005	0.774	1.39	1.94
NRLPW391M350V22X55SF		390	22X55	0.2	1108	0.851	0.655	1.93	2.70
NRLPW391M350V25X45SF		390	25X45	0.2	1108	0.851	0.655	1.86	2.60
NRLPW391M350V30X35SF		390	30X35	0.2	1108	0.851	0.655	1.74	2.43
NRLPW391M350V35X30SF		390	35X30	0.2	1108	0.851	0.655	1.63	2.28
NRLPW471M350V25X50SF		470	25X50	0.2	1216	0.706	0.544	2.06	2.88
NRLPW471M350V30X40SF		470	30X40	0.2	1216	0.706	0.544	1.96	2.74
NRLPW471M350V35X30SF		470	35X30	0.2	1216	0.706	0.544	1.66	2.32
NRLPW561M350V25X55SF		560	25X55	0.2	1328	0.593	0.457	2.27	3.17
NRLPW561M350V30X45SF		560	30X45	0.2	1328	0.593	0.457	2.17	3.03
NRLPW561M350V35X35SF		560	35X35	0.2	1328	0.593	0.457	1.90	2.66
NRLPW681M350V30X50SF		680	30X50	0.2	1463	0.488	0.376	2.40	3.36
NRLPW681M350V35X40SF		680	35X40	0.2	1463	0.488	0.376	2.13	2.98
NRLPW821M350V30X55SF		820	30X55	0.2	1607	0.405	0.312	2.62	3.66
NRLPW821M350V35X45SF		820	35X45	0.2	1607	0.405	0.312	2.36	3.3
NRLPW102M350V35X55SF		1000	35X55	0.2	1774	0.332	0.256	2.77	3.87
NRLPW122M350V35X60SF		1200	35X60	0.2	1944	0.277	0.214	2.97	4.15
NRLPW101M385V20X25SF	385	100	20X25	0.2	588	3.316	2.551	0.81	1.13
NRLPW121M385V20X30SF		120	20X30	0.2	644	2.764	2.127	0.94	1.31
NRLPW121M385V22X25SF		120	22X25	0.2	644	2.764	2.127	0.91	1.27
NRLPW151M385V20X35SF		150	20X35	0.2	720	2.211	1.701	1.08	1.51
NRLPW151M385V22X30SF		150	22X30	0.2	720	2.211	1.701	1.07	1.49
NRLPW181M385V20X40SF		180	20X40	0.2	789	1.843	1.418	1.22	1.70
NRLPW181M385V22X35SF		180	22X35	0.2	789	1.843	1.418	1.21	1.69
NRLPW181M385V25X25SF		180	25X25	0.2	789	1.843	1.418	1.11	1.55
NRLPW221M385V20X45SF		220	20X45	0.2	873	1.508	1.160	1.39	1.94
NRLPW221M385V22X40SF		220	22X40	0.2	873	1.508	1.160	1.38	1.93
NRLPW221M385V25X30SF		220	25X30	0.2	873	1.508	1.160	1.29	1.80
NRLPW221M385V30X25SF		220	30X25	0.2	873	1.508	1.160	1.25	1.75
NRLPW271M385V22X45SF		270	22X45	0.2	967	1.229	0.946	1.56	2.18
NRLPW271M385V25X35SF		270	25X35	0.2	967	1.229	0.946	1.47	2.05
NRLPW271M385V30X30SF		270	30X30	0.2	967	1.229	0.946	1.46	2.04
NRLPW331M385V22X55SF		330	22X55	0.2	1069	1.005	0.774	1.81	2.53
NRLPW331M385V25X40SF		330	25X40	0.2	1069	1.005	0.774	1.67	2.33

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW331M385V30X30SF	385	330	30X30	0.2	1069	1.005	0.774	1.53	2.14
NRLPW331M385V35X25SF		330	35X25	0.2	1069	1.005	0.774	1.37	1.91
NRLPW391M385V22X60SF		390	22X60	0.2	1162	0.851	0.655	2.00	2.80
NRLPW391M385V25X50SF		390	25X50	0.2	1162	0.851	0.655	1.94	2.71
NRLPW391M385V30X35SF		390	30X35	0.2	1162	0.851	0.655	1.73	2.42
NRLPW391M385V35X30SF		390	35X30	0.2	1162	0.851	0.655	1.62	2.26
NRLPW471M385V25X55SF		470	25X55	0.2	1276	0.706	0.544	2.15	3.01
NRLPW471M385V30X40SF		470	30X40	0.2	1276	0.706	0.544	1.94	2.71
NRLPW471M385V35X35SF		470	35X35	0.2	1276	0.706	0.544	1.84	2.57
NRLPW561M385V30X45SF		560	30X45	0.2	1392	0.593	0.457	2.15	3.01
NRLPW561M385V35X40SF		560	35X40	0.2	1392	0.593	0.457	2.07	2.89
NRLPW681M385V30X55SF		680	30X55	0.2	1534	0.488	0.376	2.51	3.51
NRLPW681M385V35X45SF		680	35X45	0.2	1534	0.488	0.376	2.29	3.20
NRLPW821M385V35X50SF		820	35X50	0.2	1685	0.405	0.312	2.50	3.50
NRLPW102M385V35X60SF		1000	35X60	0.2	1861	0.332	0.256	2.89	4.04
NRLPW680M400V20X25SF	400	68	20X25	0.2	494	4.877	3.752	0.69	0.96
NRLPW820M400V20X25SF		82	20X25	0.2	543	4.044	3.111	0.75	1.05
NRLPW820M400V22X25SF		82	22X25	0.2	543	4.044	3.111	0.78	1.09
NRLPW101M400V20X30SF		100	20X30	0.2	600	3.316	2.551	0.87	1.21
NRLPW101M400V22X25SF		100	22X25	0.2	600	3.316	2.551	0.85	1.19
NRLPW121M400V20X35SF		120	20X35	0.2	657	2.764	2.127	0.99	1.38
NRLPW121M400V22X30SF		120	22X30	0.2	657	2.764	2.127	0.97	1.35
NRLPW121M400V25X25SF		120	25X25	0.2	657	2.764	2.127	0.96	1.34
NRLPW151M400V20X40SF		150	20X40	0.2	734	2.211	1.701	1.13	1.58
NRLPW151M400V22X35SF		150	22X35	0.2	734	2.211	1.701	1.13	1.58
NRLPW151M400V25X25SF		150	25X25	0.2	734	2.211	1.701	1.04	1.45
NRLPW181M400V20X40SF		180	20X40	0.2	804	1.843	1.418	1.23	1.72
NRLPW181M400V22X35SF		180	22X35	0.2	804	1.843	1.418	1.22	1.70
NRLPW181M400V25X30SF		180	25X30	0.2	804	1.843	1.418	1.20	1.68
NRLPW181M400V30X25SF		180	30X25	0.2	804	1.843	1.418	1.18	1.65
NRLPW221M400V20X50SF		220	20X50	0.2	889	1.508	1.160	1.44	2.01
NRLPW221M400V22X45SF		220	22X45	0.2	889	1.508	1.160	1.44	2.01
NRLPW221M400V25X35SF		220	25X35	0.2	889	1.508	1.160	1.37	1.91
NRLPW221M400V30X25SF		220	30X25	0.2	889	1.508	1.160	1.25	1.75
NRLPW271M400V22X50SF		270	22X50	0.2	985	1.229	0.946	1.62	2.26
NRLPW271M400V25X40SF		270	25X40	0.2	985	1.229	0.946	1.56	2.18
NRLPW271M400V30X30SF		270	30X30	0.2	985	1.229	0.946	1.45	2.03
NRLPW271M400V35X25SF		270	35X25	0.2	985	1.229	0.946	1.34	1.87
NRLPW331M400V22X55SF		330	22X55	0.2	1089	1.005	0.774	1.82	2.54
NRLPW331M400V25X45SF		330	25X45	0.2	1089	1.005	0.774	1.76	2.46
NRLPW331M400V30X35SF		330	30X35	0.2	1089	1.005	0.774	1.66	2.32
NRLPW331M400V35X30SF		330	35X30	0.2	1089	1.005	0.774	1.57	2.19
NRLPW391M400V25X50SF		390	25X50	0.2	1184	0.851	0.655	1.94	2.71
NRLPW391M400V30X40SF		390	30X40	0.2	1184	0.851	0.655	1.86	2.60

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW391M400V35X30SF	400	390	35X30	0.2	1184	0.851	0.655	1.60	2.24
NRLPW471M400V25X55SF		470	25X55	0.2	1300	0.706	0.544	2.15	3.01
NRLPW471M400V30X45SF		470	30X45	0.2	1300	0.706	0.544	2.07	2.89
NRLPW471M400V35X35SF		470	35X35	0.2	1300	0.706	0.544	1.83	2.56
NRLPW561M400V30X50SF		560	30X50	0.2	1419	0.593	0.457	2.28	3.19
NRLPW561M400V35X40SF		560	35X40	0.2	1419	0.593	0.457	2.05	2.87
NRLPW681M400V30X55SF		680	30X55	0.2	1564	0.488	0.376	2.50	3.50
NRLPW681M400V35X45SF		680	35X45	0.2	1564	0.488	0.376	2.27	3.17
NRLPW821M400V35X55SF		820	35X55	0.2	1718	0.405	0.312	2.65	3.71
NRLPW680M420V20X25SF	420	68	20X25	0.2	506	4.877	3.752	0.69	0.96
NRLPW820M420V20X25SF		82	20X25	0.2	556	4.044	3.111	0.75	1.05
NRLPW820M420V22X25SF		82	22X25	0.2	556	4.044	3.111	0.78	1.09
NRLPW101M420V20X30SF		100	20X30	0.2	614	3.316	2.551	0.86	1.20
NRLPW101M420V22X25SF		100	22X25	0.2	614	3.316	2.551	0.85	1.19
NRLPW101M420V25X25SF		100	25X25	0.2	614	3.316	2.551	0.88	1.23
NRLPW121M420V20X35SF		120	20X35	0.2	673	2.764	2.127	0.98	1.37
NRLPW121M420V22X30SF		120	22X30	0.2	673	2.764	2.127	0.97	1.35
NRLPW121M420V25X25SF		120	25X25	0.2	673	2.764	2.127	0.95	1.33
NRLPW151M420V20X40SF		150	20X40	0.2	752	2.211	1.701	1.13	1.58
NRLPW151M420V22X35SF		150	22X35	0.2	752	2.211	1.701	1.12	1.56
NRLPW151M420V25X30SF		150	25X30	0.2	752	2.211	1.701	1.11	1.55
NRLPW151M420V30X25SF		150	30X25	0.2	752	2.211	1.701	1.10	1.54
NRLPW181M420V20X45SF		180	20X45	0.2	824	1.843	1.418	1.27	1.77
NRLPW181M420V22X40SF		180	22X40	0.2	824	1.843	1.418	1.27	1.77
NRLPW181M420V25X30SF		180	25X30	0.2	824	1.843	1.418	1.19	1.66
NRLPW181M420V30X25SF		180	30X25	0.2	824	1.843	1.418	1.16	1.62
NRLPW221M420V22X45SF		220	22X45	0.2	911	1.508	1.160	1.43	2.00
NRLPW221M420V25X35SF		220	25X35	0.2	911	1.508	1.160	1.36	1.90
NRLPW221M420V30X30SF		220	30X30	0.2	911	1.508	1.160	1.35	1.89
NRLPW221M420V35X25SF		220	35X25	0.2	911	1.508	1.160	1.27	1.77
NRLPW271M420V22X50SF		270	22X50	0.2	1010	1.229	0.946	1.62	2.26
NRLPW271M420V25X40SF		270	25X40	0.2	1010	1.229	0.946	1.55	2.17
NRLPW271M420V30X30SF		270	30X30	0.2	1010	1.229	0.946	1.43	2.00
NRLPW271M420V35X25SF		270	35X25	0.2	1010	1.229	0.946	1.30	1.82
NRLPW331M420V22X60SF		330	22X60	0.2	1116	1.005	0.774	1.86	2.6
NRLPW331M420V25X50SF		330	25X50	0.2	1116	1.005	0.774	1.74	2.43
NRLPW331M420V30X35SF		330	30X35	0.2	1116	1.005	0.774	1.64	2.29
NRLPW331M420V35X30SF		330	35X30	0.2	1116	1.005	0.774	1.54	2.15
NRLPW391M420V25X55SF		390	25X55	0.2	1214	0.851	0.655	2.00	2.80
NRLPW391M420V30X40SF		390	30X40	0.2	1214	0.851	0.655	1.83	2.56
NRLPW391M420V35X35SF		390	35X35	0.2	1214	0.851	0.655	1.75	2.45
NRLPW471M420V25X60SF		470	25X60	0.2	1332	0.706	0.544	2.21	3.09
NRLPW471M420V30X45SF		470	30X45	0.2	1332	0.706	0.544	2.04	2.85
NRLPW471M420V35X40SF		470	35X40	0.2	1332	0.706	0.544	1.97	2.75

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW561M420V30X55SF	420	560	30X55	0.2	1454	0.593	0.457	2.35	3.29
NRLPW561M420V35X45SF		560	35X45	0.2	1454	0.593	0.457	2.18	3.05
NRLPW681M420V30X60SF		680	30X60	0.2	1603	0.488	0.376	2.57	3.59
NRLPW681M420V35X50SF		680	35X50	0.2	1603	0.488	0.376	2.39	3.34
NRLPW821M420V35X55SF		820	35X55	0.2	1760	0.405	0.312	2.59	3.62
NRLPW560M450V20X25SF	450	56	20X25	0.2	476	5.921	4.555	0.63	0.88
NRLPW680M450V20X25SF		68	20X25	0.2	524	4.877	3.752	0.69	0.96
NRLPW680M450V22X25SF		68	22X25	0.2	524	4.877	3.752	0.72	1.00
NRLPW820M450V20X30SF		82	20X30	0.2	576	4.044	3.111	0.80	1.12
NRLPW820M450V22X25SF		82	22X25	0.2	576	4.044	3.111	0.78	1.09
NRLPW101M450V20X35SF		100	20X35	0.2	636	3.316	2.551	0.91	1.27
NRLPW101M450V22X30SF		100	22X30	0.2	636	3.316	2.551	0.9	1.26
NRLPW101M450V25X25SF		100	25X25	0.2	636	3.316	2.551	0.89	1.24
NRLPW121M450V20X35SF		120	20X35	0.2	697	2.764	2.127	0.99	1.38
NRLPW121M450V22X30SF		120	22X30	0.2	697	2.764	2.127	0.98	1.37
NRLPW121M450V25X25SF		120	25X25	0.2	697	2.764	2.127	0.95	1.33
NRLPW151M450V20X45SF		150	20X45	0.2	779	2.211	1.701	1.18	1.65
NRLPW151M450V22X35SF		150	22X35	0.2	779	2.211	1.701	1.13	1.58
NRLPW151M450V25X30SF		150	25X30	0.2	779	2.211	1.701	1.11	1.55
NRLPW151M450V30X25SF		150	30X25	0.2	779	2.211	1.701	1.10	1.54
NRLPW181M450V22X40SF		180	22X40	0.2	853	1.843	1.418	1.27	1.77
NRLPW181M450V25X35SF		180	25X35	0.2	853	1.843	1.418	1.27	1.77
NRLPW181M450V30X25SF		180	30X25	0.2	853	1.843	1.418	1.16	1.62
NRLPW221M450V22X50SF		220	22X50	0.2	943	1.508	1.160	1.49	2.08
NRLPW221M450V25X40SF		220	25X40	0.2	943	1.508	1.160	1.44	2.01
NRLPW221M450V30X30SF		220	30X30	0.2	943	1.508	1.160	1.35	1.89
NRLPW221M450V35X25SF		220	35X25	0.2	943	1.508	1.160	1.26	1.76
NRLPW271M450V22X55SF		270	22X55	0.2	1045	1.229	0.946	1.68	2.35
NRLPW271M450V25X45SF		270	25X45	0.2	1045	1.229	0.946	1.62	2.26
NRLPW271M450V30X35SF		270	30X35	0.2	1045	1.229	0.946	1.55	2.17
NRLPW271M450V35X30SF		270	35X30	0.2	1045	1.229	0.946	1.48	2.07
NRLPW331M450V25X50SF		330	25X50	0.2	1156	1.005	0.774	1.82	2.54
NRLPW331M450V30X40SF		330	30X40	0.2	1156	1.005	0.774	1.75	2.45
NRLPW331M450V35X30SF		330	35X30	0.2	1156	1.005	0.774	1.52	2.12
NRLPW391M450V25X60SF		390	25X60	0.2	1256	0.851	0.655	2.07	2.89
NRLPW391M450V30X45SF		390	30X45	0.2	1256	0.851	0.655	1.93	2.70
NRLPW391M450V35X35SF		390	35X35	0.2	1256	0.851	0.655	1.74	2.43
NRLPW471M450V30X50SF		470	30X50	0.2	1379	0.706	0.544	2.14	2.99
NRLPW471M450V35X40SF		470	35X40	0.2	1379	0.706	0.544	1.95	2.73
NRLPW561M450V30X55SF		560	30X55	0.2	1505	0.593	0.457	2.34	3.27
NRLPW561M450V35X45SF		560	35X45	0.2	1505	0.593	0.457	2.16	3.02
NRLPW681M450V35X55SF		680	35X55	0.2	1659	0.488	0.376	2.51	3.51
NRLPW821M450V35X60SF		820	35X60	0.2	1822	0.405	0.312	2.71	3.79

Part Number	Voltage (VDC)	Cap (μF)	Case Size D x L (mm)	Dissipation Factor	Max. Leakage Current (μA)	ESR (Ω @ 20°C)		Max. Ripple Current (Arms @ 105°C)	
						120Hz	20KHz	120Hz	10K~50KHz
NRLPW390M500V20X25SF	500	39	20X25	0.25	418	10.628	8.176	0.51	0.71
NRLPW470M500V20X30SF		47	20X30	0.25	459	8.819	6.784	0.59	0.82
NRLPW470M500V22X25SF		47	22X25	0.25	459	8.819	6.784	0.58	0.81
NRLPW560M500V20X35SF		56	20X35	0.25	501	7.402	5.694	0.67	0.93
NRLPW560M500V22X30SF		56	22X30	0.25	501	7.402	5.694	0.66	0.92
NRLPW680M500V20X40SF		68	20X40	0.25	553	6.096	4.690	0.76	1.06
NRLPW680M500V22X30SF		68	22X30	0.25	553	6.096	4.690	0.73	1.02
NRLPW680M500V25X25SF		68	25X25	0.25	553	6.096	4.690	0.72	1.00
NRLPW820M500V20X45SF		82	20X45	0.25	607	5.055	3.889	0.85	1.19
NRLPW820M500V22X35SF		82	22X35	0.25	607	5.055	3.889	0.83	1.16
NRLPW820M500V25X30SF		82	25X30	0.25	607	5.055	3.889	0.83	1.16
NRLPW820M500V30X25SF		82	30X25	0.25	607	5.055	3.889	0.83	1.16
NRLPW101M500V22X40SF		100	22X40	0.25	670	4.145	3.189	0.94	1.31
NRLPW101M500V25X35SF		100	25X35	0.25	670	4.145	3.189	0.94	1.31
NRLPW101M500V30X25SF		100	30X25	0.25	670	4.145	3.189	0.91	1.27
NRLPW121M500V22X50SF		120	22X50	0.25	734	3.454	2.657	1.08	1.51
NRLPW121M500V25X35SF		120	25X35	0.25	734	3.454	2.657	1.02	1.42
NRLPW121M500V30X30SF		120	30X30	0.25	734	3.454	2.657	1.04	1.45
NRLPW121M500V35X25SF		120	35X25	0.25	734	3.454	2.657	1.01	1.41
NRLPW151M500V22X55SF		150	22X55	0.25	821	2.764	2.127	1.24	1.73
NRLPW151M500V25X45SF		150	25X45	0.25	821	2.764	2.127	1.21	1.69
NRLPW151M500V30X35SF		150	30X35	0.25	821	2.764	2.127	1.19	1.66
NRLPW151M500V35X30SF		150	35X30	0.25	821	2.764	2.127	1.18	1.65
NRLPW181M500V22X60SF		180	22X60	0.25	900	2.303	1.772	1.38	1.93
NRLPW181M500V25X50SF		180	25X50	0.25	900	2.303	1.772	1.36	1.90
NRLPW181M500V30X40SF		180	30X40	0.25	900	2.303	1.772	1.34	1.87
NRLPW181M500V35X30SF		180	35X30	0.25	900	2.303	1.772	1.25	1.75
NRLPW221M500V25X55SF		220	25X55	0.25	994	1.884	1.450	1.52	2.12
NRLPW221M500V30X45SF		220	30X45	0.25	994	1.884	1.450	1.51	2.11
NRLPW221M500V35X40SF		220	35X40	0.25	994	1.884	1.450	1.51	2.11
NRLPW271M500V30X50SF		270	30X50	0.25	1102	1.536	1.182	1.69	2.36
NRLPW271M500V35X40SF		270	35X40	0.25	1102	1.536	1.182	1.62	2.26
NRLPW331M500V30X55SF		330	30X55	0.25	1218	1.256	0.967	1.89	2.64
NRLPW331M500V35X45SF		330	35X45	0.25	1218	1.256	0.967	1.81	2.53
NRLPW391M500V35X55SF		390	35X55	0.25	1324	1.063	0.818	2.08	2.91
NRLPW471M500V35X60SF		470	35X60	0.25	1454	0.882	0.679	2.28	3.19