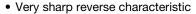


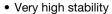
Vishay Semiconductors

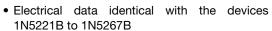
Small Signal Zener Diodes



FEATURES









· Low reverse current level

- Standard Zener voltage tolerance ± 5 %
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

LINKS TO ADDITIONAL RESOURCES



PRIMARY CHARACTERISTICS					
PARAMETER	VALUE	UNIT			
V _Z range nom.	2.4 to 75	V			
Test current I _{ZT}	1.7 to 20	mA			
V _Z specification	Thermal equilibrium				
Circuit configuration	Single				

APPLICATIONS

· Voltage stabilization

ORDERING INFORMATION					
DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL	MINIMUM ORDER QUANTITY		
TZM5221B to TZM5267B	TZM5221B to TZM5267B-series-GS18	10 000 (8 mm tape on 13" reel)	10 000/box		
TZM5221B to TZM5267B	TZM5221B to TZM5267B-series-GS08	2500 (8 mm tape on 7" reel)	12 500/box		

PACKAGE						
PACKAGE NAME WEIGHT		MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS		
MiniMELF (SOD-80)	31 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260 °C		

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION SY		VALUE	UNIT	
Power dissipation	$R_{thJA} = < 300 \text{ K/W}$	P _{tot}	500	mW	
Zener current		I _Z	P _{tot} /V _Z	mA	
Junction to ambient air	On PC board 50 mm x 50 mm x 1.6 mm	R _{thJA}	500	K/W	
Junction temperature		Tj	175	°C	
Storage temperature range		T _{stg}	-65 to +175	°C	
Forward voltage (max.)	I _F = 200 mA	V _F	1.1	V	



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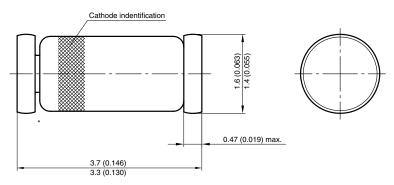
	ZENER VOLTAGE	REVERSE DYNAMIC RESISTANCE			DECICTATION	TEMPERATURE			
	RANGE (1)	TEST CURRENT		LEAKAGE CURRENT		DYNAMIC RESISTANCE		COEFFICIENT	
PART NUMBER	V _Z at I _{ZT1}	I _{ZT1}	I _{ZT2}	I _R at V _R		Z_Z at I_{ZT1} Z_{ZK} at I_{ZT2} f = 1 kHz		TK _{VZ}	
	V	mA		μ A V		Ω		%/K	
	NOM.		<u></u>	μ.,	-	TYP.	TYP.	/0/ N	
TZM5221	2.4	20	0.25	< 100	1	< 30	< 1200	< -0.085	
TZM5222	2.5	20	0.25	< 100	1	< 30	< 1250	< -0.085	
TZM5223	2.7	20	0.25	< 75	1	< 30	< 1300	< -0.080	
TZM5224	2.8	20	0.25	< 75	1	< 30	< 1400	< -0.080	
TZM5225	3	20	0.25	< 50	1	< 29	< 1600	< -0.075	
TZM5226	3.3	20	0.25	< 25	1	< 28	< 1600	< -0.070	
TZM5227	3.6	20	0.25	< 15	1	< 24	< 1700	< -0.065	
TZM5228	3.9	20	0.25	< 10	1	< 23	< 1900	< -0.060	
TZM5229	4.3	20	0.25	< 5	1	< 22	< 2000	< ± 0.055	
TZM5230	4.7	20	0.25	< 5	2	< 19	< 1900	< ± 0.030	
TZM5231	5.1	20	0.25	< 5	2	< 17	< 1600	< ± 0.030	
TZM5232	5.6	20	0.25	< 5	3	< 11	< 1600	< +0.038	
TZM5233	6	20	0.25	< 5	3.5	< 7	< 1600	< +0.038	
TZM5234	6.2	20	0.25	< 5	4	< 7	< 1000	< +0.045	
TZM5235	6.8	20	0.25	< 3	5	< 5	< 750	< +0.050	
TZM5236	7.5	20	0.25	< 3	6	< 6	< 500	< +0.058	
TZM5237	8.2	20	0.25	< 3	6.5	< 8	< 500	< +0.062	
TZM5238	8.7	20	0.25	< 3	6.5	< 8	< 600	< +0.065	
TZM5239	9.1	20	0.25	< 3	7	< 10	< 600	< +0.068	
TZM5240	10	20	0.25	< 3	8	< 17	< 600	< +0.075	
TZM5241	11	20	0.25	< 2	8.4	< 22	< 600	< +0.076	
TZM5242	12	20	0.25	< 1	9.1	< 30	< 600	< +0.077	
TZM5243	13	9.5	0.25	< 0.5	9.9	< 13	< 600	< +0.079	
TZM5244	14	9	0.25	< 0.1	10	< 15	< 600	< +0.082	
TZM5245	15	8.5	0.25	< 0.1	11	< 16	< 600	< +0.082	
TZM5246	16	7.8	0.25	< 0.1	12	< 17	< 600	< +0.083	
TZM5247	17	7.4	0.25	< 0.1	13	< 19	< 600	< +0.084	
TZM5248	18	7	0.25	< 0.1	14	< 21	< 600	< +0.085	
TZM5249	19	6.6	0.25	< 0.1	14	< 23	< 600	< +0.086	
TZM5250	20	6.2	0.25	< 0.1	15	< 25	< 600	< +0.086	
TZM5251	22	5.6	0.25	< 0.1	17	< 29	< 600	< +0.087	
TZM5252	24	5.2	0.25	< 0.1	18	< 33	< 600	< +0.088	
TZM5253	25	5	0.25	< 0.1	19	< 35	< 600	< +0.089	
TZM5254	27	4.6	0.25	< 0.1	21	< 41	< 600	< +0.090	
TZM5255	28	4.5	0.25	< 0.1	21	< 44	< 600	< +0.091	
TZM5256	30	4.2	0.25	< 0.1	23	< 49	< 600	< +0.091	
TZM5257	33	3.8	0.25	< 0.1	25	< 58	< 700	< +0.092	
TZM5258	36	3.4	0.25	< 0.1	27	< 70	< 700	< +0.093	
TZM5259	39	3.2	0.25	< 0.1	30	< 80	< 800	< +0.094	
TZM5260	43	3	0.25	< 0.1	33	< 93	< 900	< +0.095	
TZM5261	47	2.7	0.25	< 0.1	36	105	< 1000	< +0.095	
TZM5262	51	2.7	0.25	< 0.1	39	125	< 1100	< +0.095 < +0.096	
TZM5263	56	2.2	0.25	< 0.1	43	150	< 1300	< +0.096	
TZM5264	60	2.2	0.25	< 0.1	46	170	< 1400	< +0.096 < +0.097	
TZM5264 TZM5265	62	2.1	0.25	< 0.1	46	185	< 1400	< +0.097 < +0.097	
TZM5266	68	1.8	0.25	< 0.1	52	230	< 1400	< +0.097 < +0.097	
TZM5266	75	1.7	0.25	< 0.1	56	270	< 1700	< +0.097 < +0.098	

Note

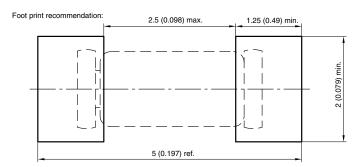
 $^{(1)}$ Based on DC measurement at thermal equilibrium; case temperature maintained at 30 $^{\circ}$ C \pm 2 $^{\circ}$ C

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PACKAGE DIMENSIONS in millimeters (inches): MiniMELF (SOD-80)



* The gap between plug and glass can be either on cathode or anode side



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