

DATA SHEET

TRANSIENT VOLTAGE SUPPRESSORS

AC/DC POWER SUPPLY

HF-C series

RoHS compliant & Halogen free



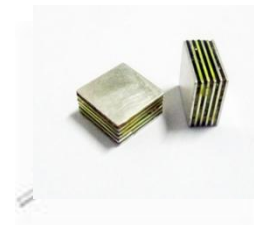
Product specification— November 26, 2018 V.0



Transient Voltage Suppressors (TVS) Data Sheet

Features

- High current transient suppressor
- Excellent clamping capability
- Glass passivated junction
- Bi-directional.
- Low slope resistance.
- Hazardous Substances Free.
- RoHS compliant

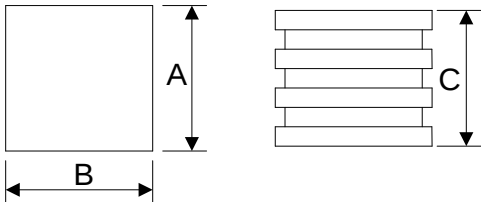


Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value		Units
Current Rating	I_{PP}	HFA-C	3	KA
		HFB-C	6	
		HFC-C	10	
Operating junction and Storage Temperature Range.	T_J, T_{STG}	-55 to +175		°C

Dimensions

	Symbol	Dimension	
		Inches	Millimeters
A		0.370±0.016	9.4±0.4
B		0.370±0.016	9.4±0.4
C		0.787max	20max

Note: Drawing here are for illustration only, actual assembly depends on specific part number.

Electrical Characteristics (T_A=25°C)

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	V _{AC} (V)	V _{DC} (V)	V _{BR} (V) MIN.@I _T	I _T (mA)	Rated I _{PP} measured with 8/20μs	10/1000μs	V _C (V) @I _{PP}	I _R (μA) @V _{DC}
HFA-012C	8.5	12.8	14	1	3KA	500	80	20
HFA-015C	11	15	17	1	3KA	650	85	20
HFA-020C	14	20	22	1	3KA	800	90	20
HFA-025C	17	25	28	1	3KA	950	95	20
HFA-030C	21	30	33	1	3KA	1200	100	20
HFA-042C	30	42	47	1	3KA	1700	105	20
HFA-058C	40	58	64	1	3KA	2450	110	20
HFA-066C	45	66	70	1	3KA	2600	120	20
HFA-076C	54	76	85	1	3KA	2800	140	20
HFA-100C	72	100	110	1	3KA	4250	165	20
HFA-133C	100	133	147	1	3KA	5300	220	20
HFA-170C	130	170	180	1	3KA	7000	260	20
HFA-190C	145	190	200	1	3KA	8400	290	20
HFA-200C	150	200	222	1	3KA	8600	330	20
HFA-240C	180	240	250	1	3KA	9100	340	20
HFA-275C	210	275	300	1	3KA	9500	435	20
HFA-300C	230	300	330	1	3KA	12750	470	20
HFA-380C	275	380	401	1	3KA	15000	520	20
HFA-430C	310	430	440	1	3KA	18000	625	20
HFA-460C	330	460	500	1	3KA	18500	770	20
HFA-500C	385	500	558	1	3KA	19500	868	20
HFB-012C	8.5	12.8	14	1	6KA	1000	80	20
HFB-015C	11	15	17	1	6KA	1300	85	20
HFB-020C	14	20	22	1	6KA	1600	90	20
HFB-025C	17	25	28	1	6KA	1900	95	20
HFB-030C	21	30	33	1	6KA	2400	100	20
HFB-042C	30	42	47	1	6KA	3400	105	20
HFB-058C	40	58	64	1	6KA	4900	110	20
HFB-066C	45	66	70	1	6KA	5200	120	20
HFB-076C	54	76	85	1	6KA	5600	140	20
HFB-100C	72	100	110	1	6KA	8500	165	20
HFB-133C	100	133	147	1	6KA	10600	220	20
HFB-170C	130	170	180	1	6KA	14000	260	20

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Energy	Maximum Clamping Voltage	Reverse Leakage
	V _{AC} (V)	V _{DC} (V)	V _{BR} (V) MIN. @ I _T	I _T (mA)	Rated I _{PP} measured with 8/20μs	10/1000μs	V _C (V) @ I _{PP}	I _R (μA) @ V _{DC}
HFB-190C	145	190	200	1	6KA	16800	290	20
HFB-200C	150	200	222	1	6KA	17200	330	20
HFB-240C	180	240	250	1	6KA	18000	340	20
HFB-275C	210	275	300	1	6KA	19000	435	20
HFB-300C	230	300	330	1	6KA	25500	470	20
HFB-380C	275	380	401	1	6KA	30000	520	20
HFC-012C	8.5	12.8	14	1	10KA	1665	80	20
HFC-015C	11	15	17	1	10KA	2164.5	85	20
HFC-020C	14	20	22	1	10KA	2664	90	20
HFC-025C	17	25	28	1	10KA	3163.5	95	20
HFC-030C	21	30	33	1	10KA	3996	100	20
HFC-042C	30	42	47	1	10KA	5661	105	20
HFC-058C	40	58	64	1	10KA	8158.5	110	20
HFC-066C	45	66	70	1	10KA	8658	120	20
HFC-076C	54	76	85	1	10KA	9324	140	20
HFC-100C	72	100	110	1	10KA	14152.5	165	20
HFC-133C	100	133	147	1	10KA	17649	220	20
HFC-170C	130	170	180	1	10KA	23310	260	20
HFC-190C	145	190	200	1	10KA	27972	290	20

Notes: 1. T_A=25°C unless otherwise specified

2. Using 8/20μs wave shape pulses as defined in IEC61000-4-5

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

Figure 1. Power Derating Curve

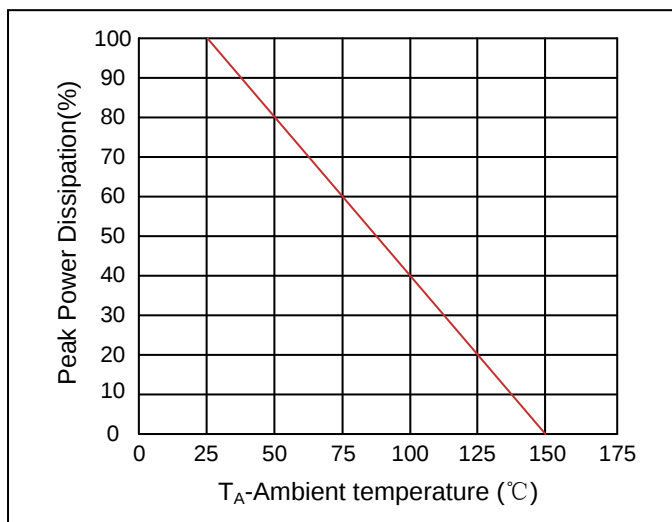
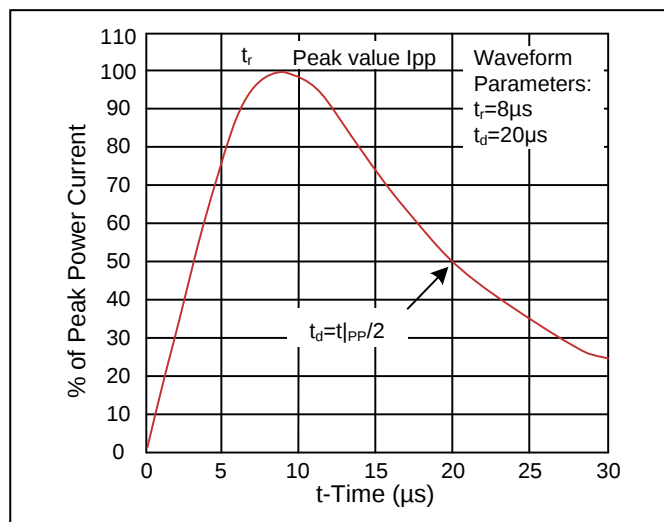
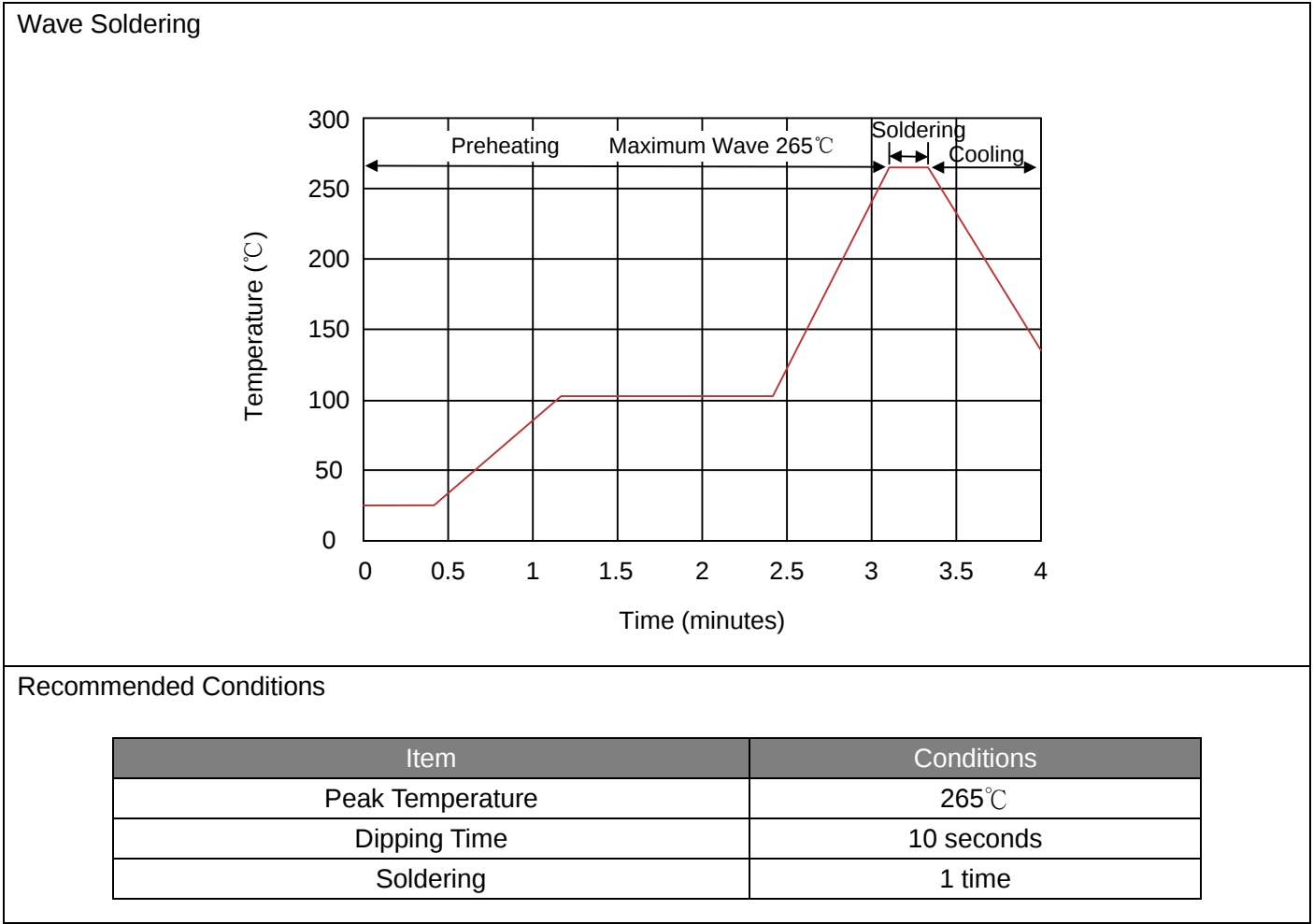


Figure 2. Pulse Waveform



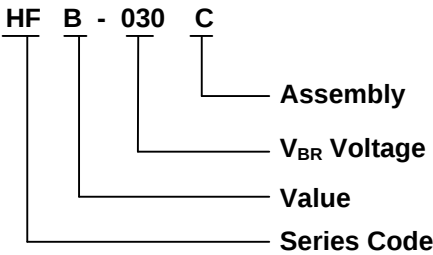
Recommended Soldering Conditions



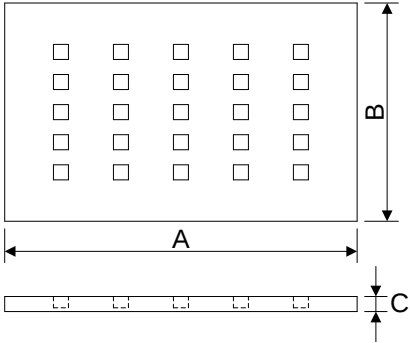
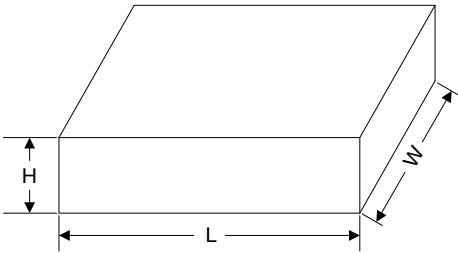
Marking Code

N/A

Part Number Code



Packaging

Hole foam packing 	Symbol	Dimension (mm)
	A	235.0±1.0
	B	147.0±1.0
	C	10.0±1.0
	Quantity: 25PCS	
Inner Box 	L	250.0
	W	65.0
	H	165.0
	Quantity: 75PCS	