

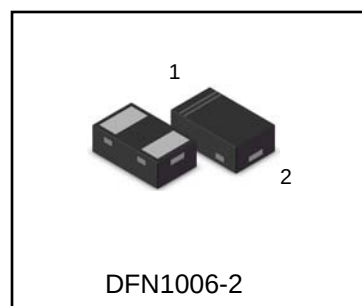
Transient Voltage Suppressors for ESD Protection

Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Features

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 70 Watts @ 8 x 20 μ s Pulse
- Low Leakage current
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

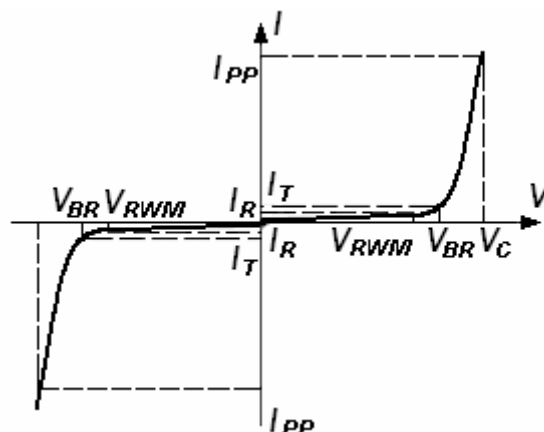


Absolute Ratings ($T_{amb}=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	70	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 to +155	$^{\circ}\text{C}$
T_{op}	Operating Temperature Range	-40 to +125	$^{\circ}\text{C}$
T_j	Maximum junction temperature	150	$^{\circ}\text{C}$
	IEC61000-4-2 (ESD) air discharge contact discharge	± 15 ± 8	KV
	IEC61000-4-4 (EFT)	20	A
	ESD Voltage Per Human Body Model	16	KV

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. VF = 0.9V at IF = 10mA

	V_{RWM} (V)	I_R (uA) @ V_{RWM}	V_{BR} (V)@ I_T (Note 1)	I_T	V_C (V) @ $I_{PP}=5$ A*	V_C (V) @ Max I_{PP} *	I_{PP} (A)*	P_{PK} (W)*	C (pF)
	Max	Max	Min	mA	Typ	Max	Max	Max	Typ
2C034V	3.4V	1.0	5.0	1.0	8.5	10.9	6.4	70	15
2C051V	5.1V	1.0	6.2	1.0	7.1	12.5	5.6	70	15
2C071V	7.1V	1.0	8.5	1.0	13.2	14.6	5.4	80	10
2C13V	13V	1.0	13.5	1.0	16.5	18.6	4.4	80	8
2C16V	16V	1.0	17.1	1.0	19.1	21.5	4.2	90	12
2C25V	25V	1.0	27.7	1.0	29.9	27.2	3.3	90	12

*Surge current waveform per Figure 1.

1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

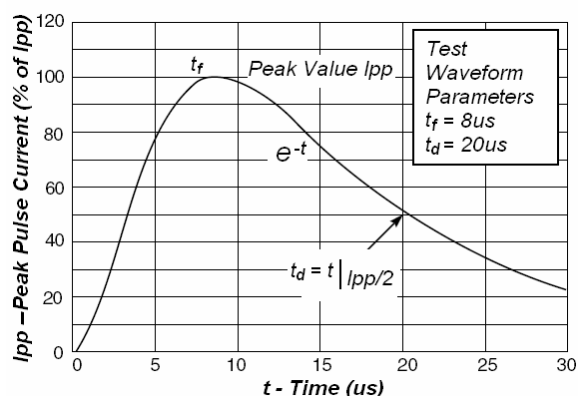


Fig1. Pulse Waveform

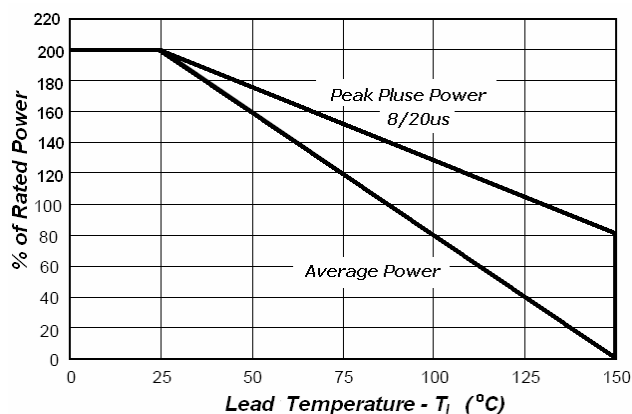


Fig2. Power Derating Curve

SOD882

DIMENSION OUTLINE:

Unit:mm

