



STANDARD CAPACITANCE TVS

Features

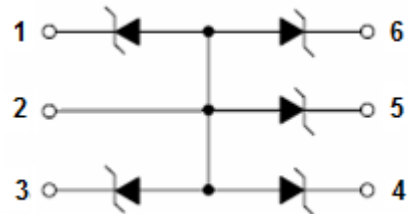
- Small SOT-363 SMT Package
- Peak Power Dissipation 100W @8 x 20 us Pulse
- Low Leakage Current < 1uA @3 Volts
- Fast Response Time < 1 ns
- Low Capacitance
- ESD Protection to IEC 61000-4-2 Level 4
- RoHS Compliant in Lead-Free Versions

SOT363



Applications

- Instrumentation Equipment
- Serial and Parallel Ports
- Microprocessor Based Equipment
- Notebooks, Desktops, Servers



Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Power Dissipation (Note 1.) @T _L = 25°C	P _{PK}	100	W
Maximum Junction Temperature	T _{Jmax}	150	°C
Operating Junction Temperature Range	T _J	-55 to 150	°C
Storage Temperature Range	T _{STG}	-55 to 150	°C

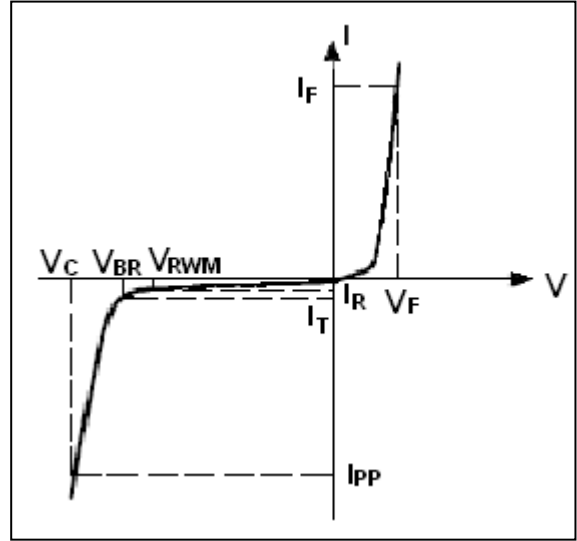
1. 8 X 20 us, non-repetitive Figure 1.

SMF05C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Device	Marking	V_{RWM} (V)	I_R (uA) @ V_{RWM}	V_{BR} (V) @ 1 mA			V_C (V) @ 5A	Capacitance @ 0V Bias (pF) (note 2)	
		Max	Max	Min	Nom	Max	Max	Typ	Max
SMF05C		5	5.0	6.1	6.6	7.2	9.8	--	110

*Surge current waveform per Figure 1.

2. Capacitance of one diode at $f=1\text{MHz}$, $V_R=0\text{V}$, $T_A=25^\circ\text{C}$.

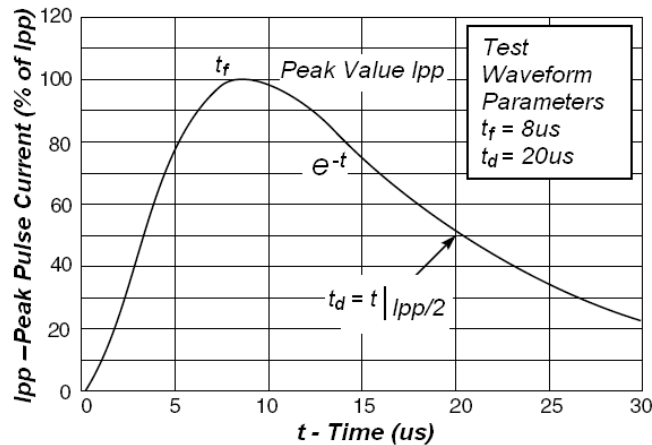


Fig1. Pulse Waveform

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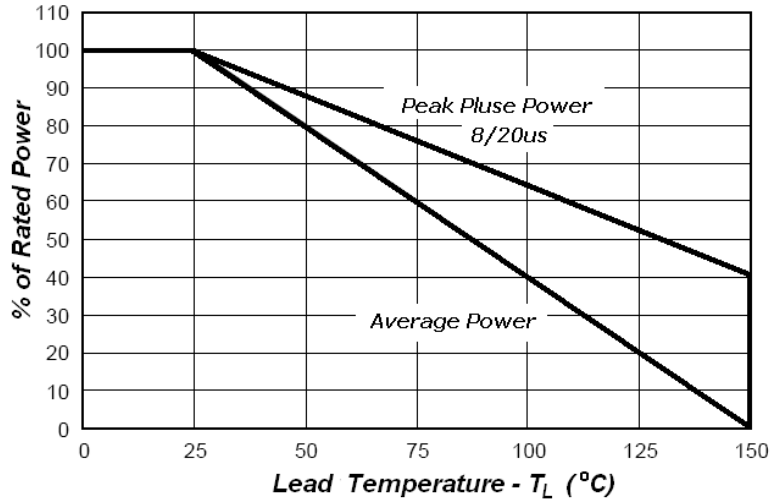
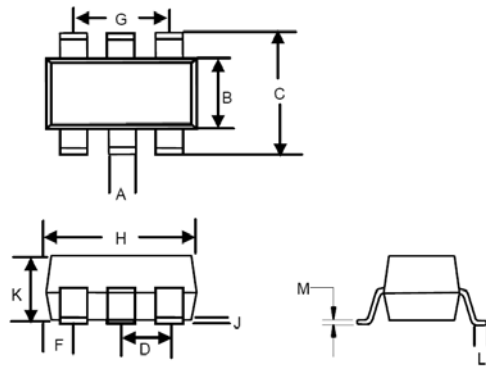


Fig2. Power Derating

Package Dimensions

SOT-363



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.004	.012	0.10	0.30	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026		0.65Nominal		
F	.012	.016	0.30	0.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.039	0.90	1.00	
L	.010	.016	0.25	0.40	
M	.004	.016	0.10	0.25	