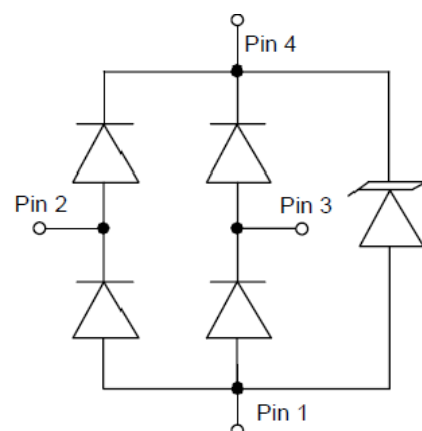


Features

- ◇ 150W (8/20 μ s) Peak Pulse Power
- ◇ Low Capacitance ESD Protection
- ◇ SOT-143 Package
- ◇ RoHS Compliant
- ◇ Matte Tin Lead finish (Pb-Free)
- ◇ Protect Two High Speed Data Lines and Vcc
- ◇ Meet IEC61000-4-2 Level 4:
 - Contact Discharge > 13kV
 - Air Discharge > 18kV

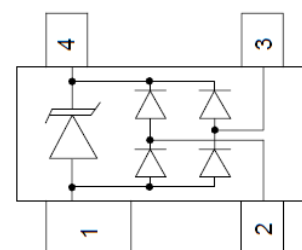
Circuit Diagram



Applications

- ◇ I²C Bus Protection
- ◇ ISDN S/T Interface
- ◇ Ethernet 10/100 BaseT
- ◇ Portable Electronics
- ◇ Video Line Protection
- ◇ WAN/LAN Equipment
- ◇ Microcontroller Input Protection
- ◇ USB Power and Data Line Protection
- ◇ T1/E1 Secondary IC Side Protection

PIN Diagram



Ordering information

Device	Package	Reel Size	Qty / Reel
SR05	SOT-143	7 inch	3000

Maximum Ratings (Ta = 25°C)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	150	W
IPP	Peak Pulse Current	5	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	13	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	18	kV
TJ	Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C

Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	6			V
IR	Reverse Leakage Current	VRWM = 5V			1	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)			15	V
VC	Clamping Voltage	IPP = 5A (8/20μs)			30	V
CJ	Capacitance	VR = 0V, f = 1MHz Between I/O pins			0.5	pF
CJ	Capacitance	VR = 0V, f = 1MHz Any I/O to ground			1.0	pF

Typical Performance Curves

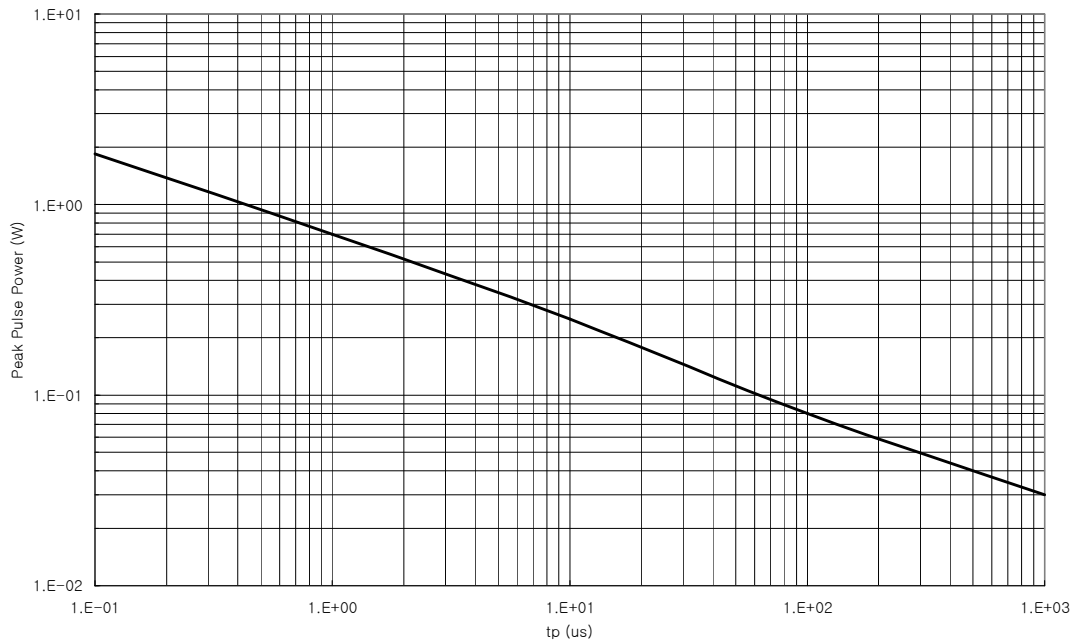


Figure 1. Peak Pulse Power Derating

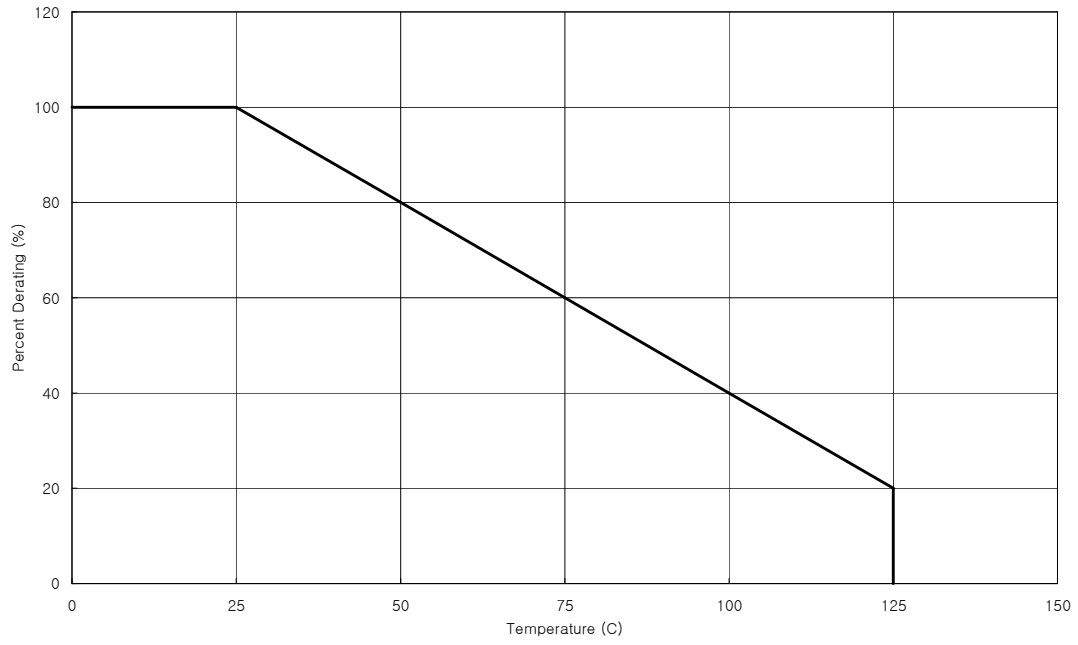


Figure 2. Peak Pulse Power Derating vs Temperature

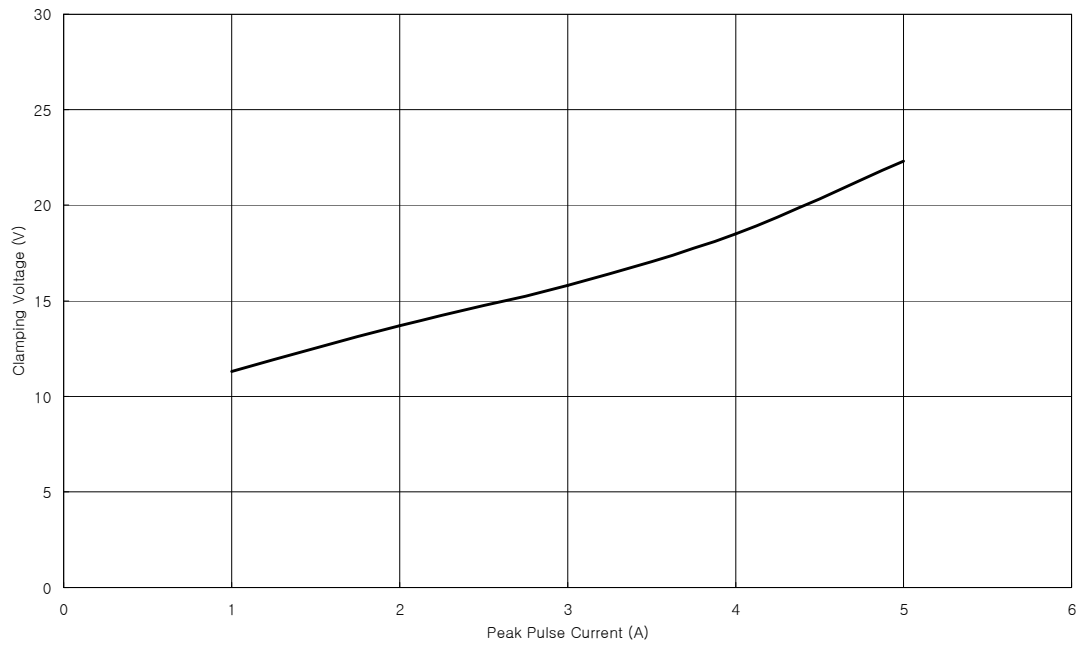


Figure 3. Peak Pulse Current vs Clamping Voltage

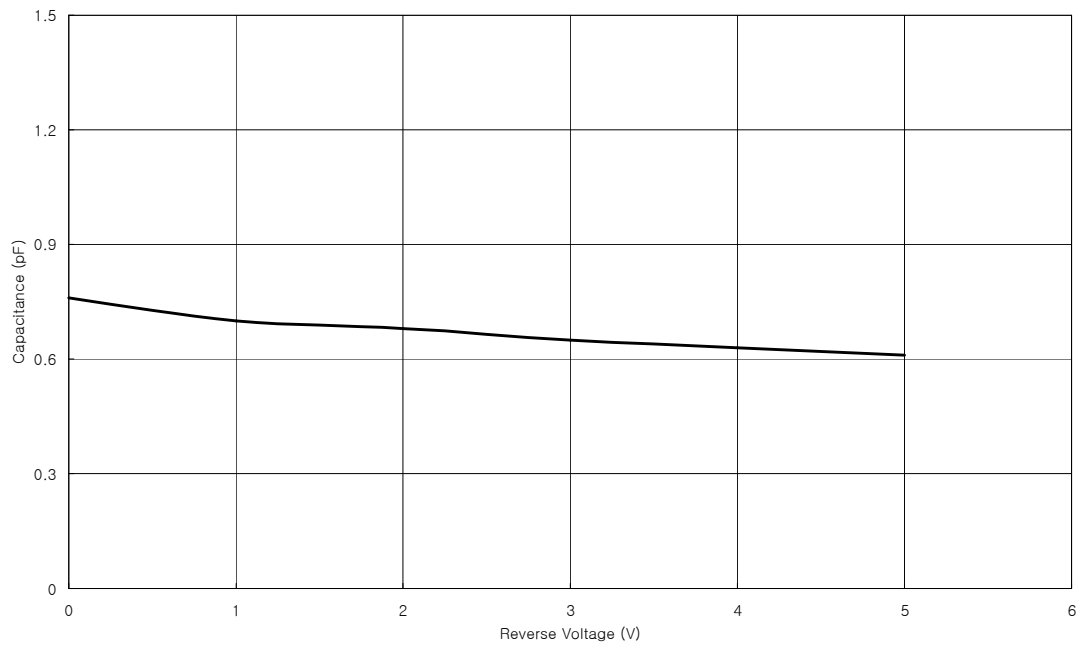


Figure 4. Reverse Voltage vs Capacitance

SOT-143 Dimension

