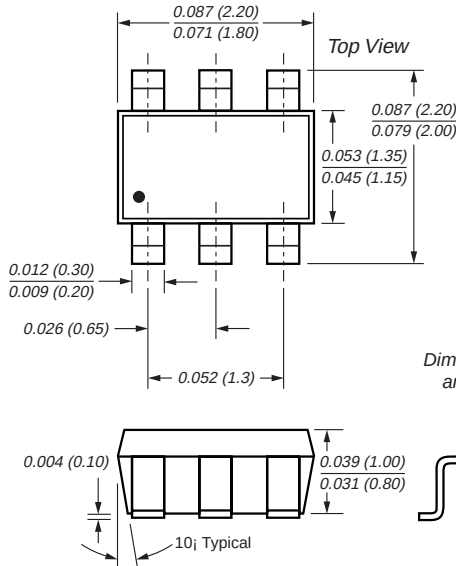


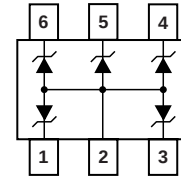
TVS Diode Array

For ESD & Latch-Up Protection

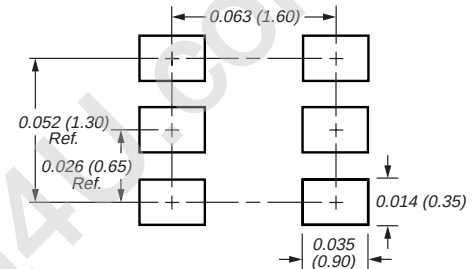
SOT-363



Pin Configuration (Top View)



Mounting Pad Layout



Mechanical Data

Case: SOT-363 package

Molding Compound Flammability Rating: UL 94V-0

Terminals: High temperature soldering guaranteed:
250°C/10 sec. at terminals

Marking Code: GF5

Packaging Codes - Options:

G1 - 10K per 13" reel, 30K/box

G2 - 3K per 7" reel, 30K/box

Features

- Transient protection for data lines as per
IEC 1000-4-2 (ESD) 15kV (air), 8kV (contact)
IEC 1000-4-4 (EFT) 40A (tp = 5/50ns)
IEC 1000-4-5 (Lightning) 12A (tp = 8/20 μ s)
- Small package for use in portable electronics
- Bidirectional protection of 4 I/O lines
- Unidirectional protection of 5 I/O lines
- Low leakage current • Low operating and clamping voltages
- Ideal for cellular handsets, cordless phones, notebooks and handhelds, and digital cameras

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power 8/20 μ s waveform	P _{ppm}	200	W
Peak Pulse Current 8/20 μ s waveform	I _{pp}	12	A
Operating Temperature	T _J	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Reverse Stand-Off Voltage	V _{RWM}	—	—	5	V
Reverse Breakdown Voltage at I _T = 1mA	V _{BR}	6	—	—	V
Reverse Leakage Current at V _{RWM} = 5V	I _R	—	—	10	μ A
Clamping Voltage at I _{PP} = 1A, 8/20 μ s waveform at I _{PP} = 12A, 8/20 μ s waveform	V _C	—	—	9.5 12.5	V
Peak Forward Voltage at I _F = 1A, 8/20 μ s waveform	V _F	—	1.5	—	V
Junction Capacitance between I/O pins and Gnd V _R = 0V, f = 1MHz	C _j	—	—	150	pF

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Non-Repetitive Peak Pulse Power vs. Pulse Time

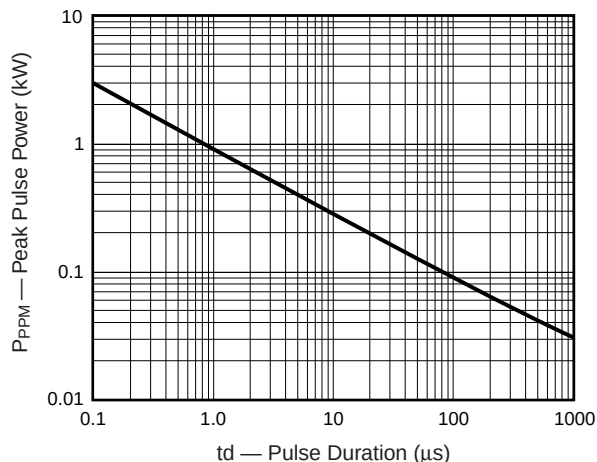


Fig. 2 – Pulse Derating Curve

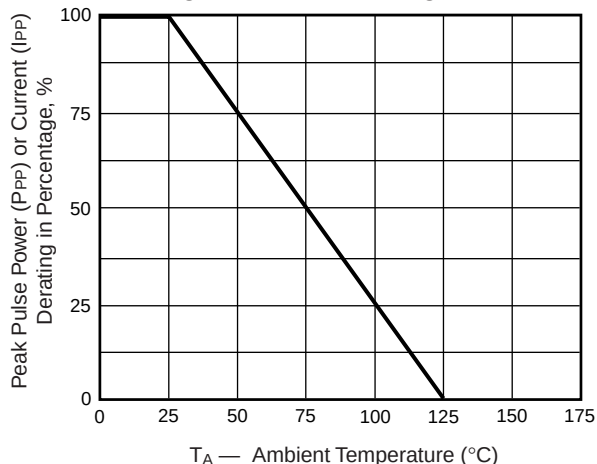


Fig. 3 – Pulse Waveform

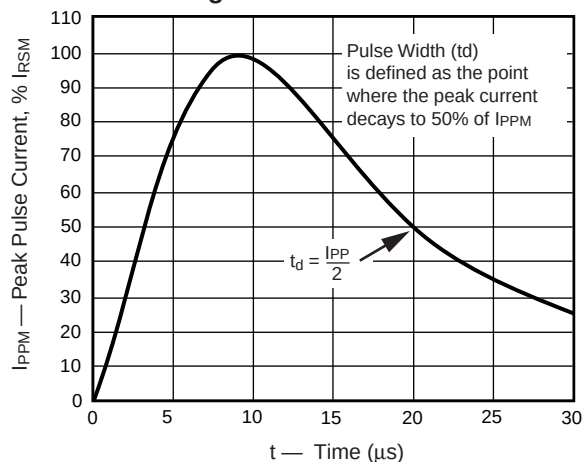


Fig. 4 – Clamping Voltage vs. Peak Pulse Current

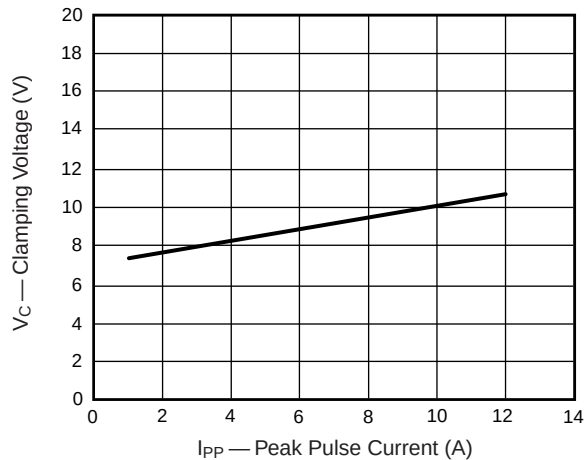


Fig. 5 – Typical Junction Capacitance

