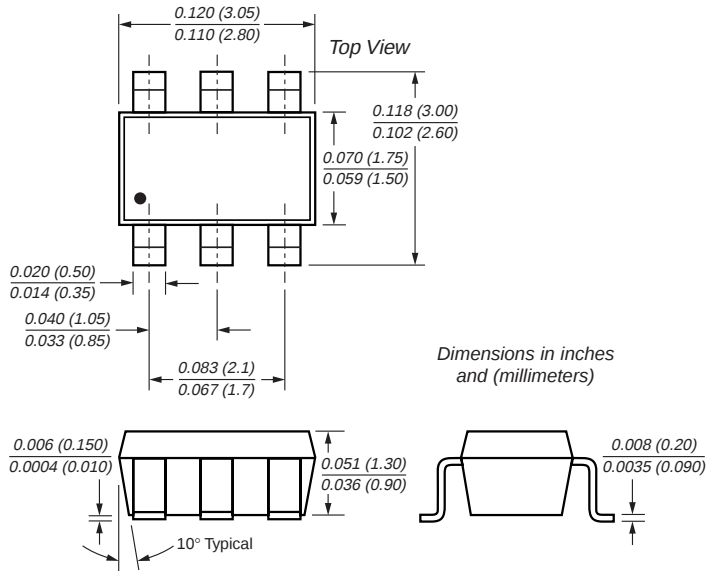
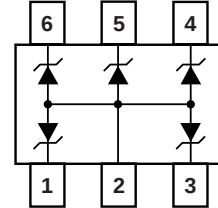
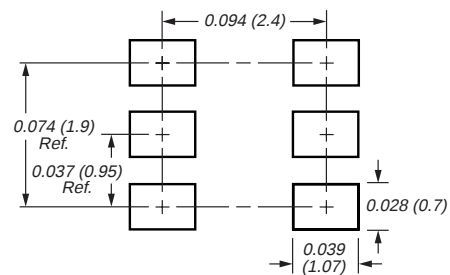

SOT-23-6L

Surface Mount TVS Diode Array


**Pin Configuration
SOT-23-6L (Top View)**

Mounting Pad Layout


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) 24A (tp = 8/20μs)
- Small package for use in portable electronics
- Protects 5 I/O lines • Low leakage current
- Low operating and clamping voltages
- High temperature guaranteed: 250°C/10 sec. at terminals

Mechanical Characteristics

Case: SOT-23-6L package

Molding Compound Flammability Rating: UL 94V-0

Marking Code: C05

Packaging Codes – Options:

E8 – 10K per 13" reel, 30K/box

E9 – 3K per 7" reel, 30K/box

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

Parameter	Symbol	Value	Unit
Peak Pulse Power 8/20μs waveform	PPPM	350	W
Peak Pulse Current 8/20μs waveform	I _{PP}	24	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	–	–	20	μA
Clamping Voltage at I _{PP} = 5A, 8/20μs waveform at I _{PP} = 24A, 8/20μs waveform	V _C	–	–	9.8 14.5	V
Peak Forward Voltage at I _F = 1A, 8/20μs waveform	V _F	–	1.5	–	V
Junction Capacitance between I/O pins and Gnd V _R = 0V, f = 1MHz	C _j	–	325	400	pF

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

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

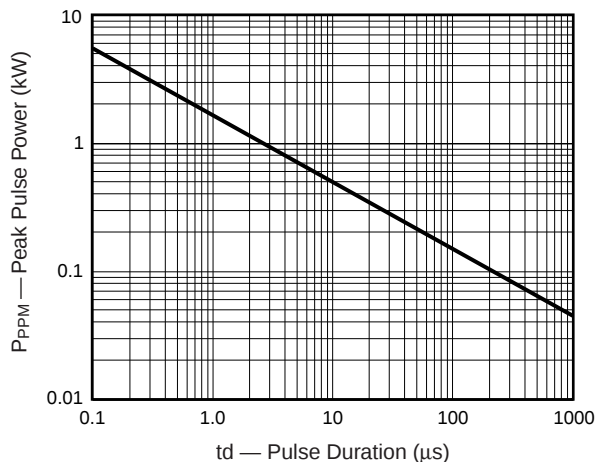


Fig. 2 – Pulse Derating Curve

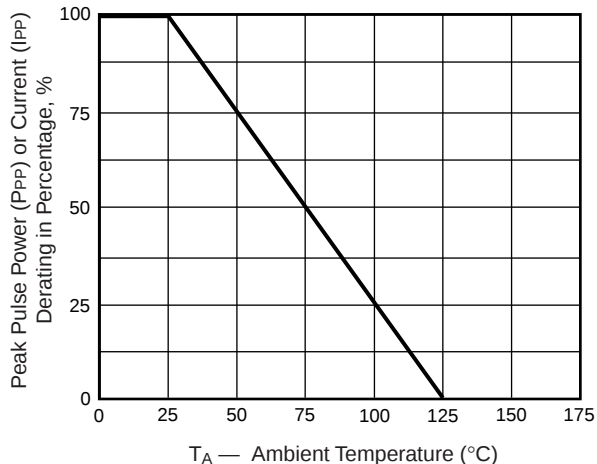


Fig. 3 – Pulse Waveform

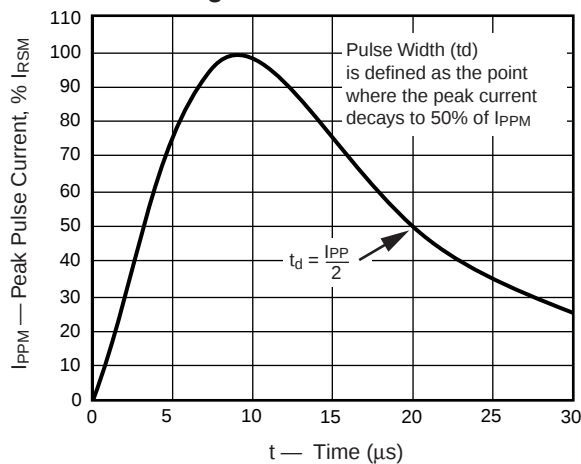


Fig. 4 – Clamping Voltage vs. Peak Pulse Current

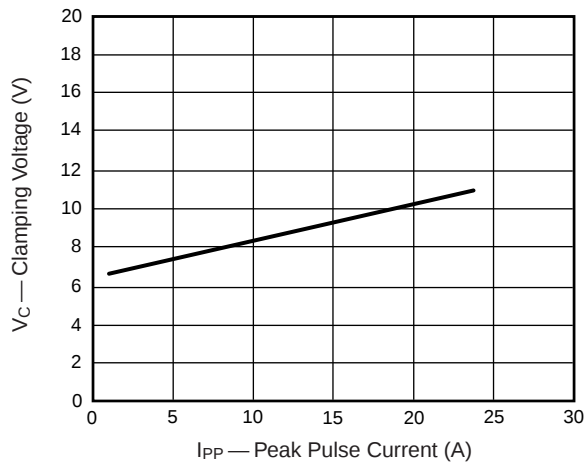


Fig. 5 – Typical Junction Capacitance

