

RoHS Compliant Product

SOD-323 (SC-76)

● FEATURES

- . 300 Watts peak pulse power ($t = 8 / 20 \mu s$)
- . Small package for use in portable electronics
- . Suitable replacement for MLV's in ESD protection applications
- . Protects one I/O or power line
- . Low clamping voltage
- . Low leakage current
- . Solid-state silicon-avalanche technology



● APPLICATIONS

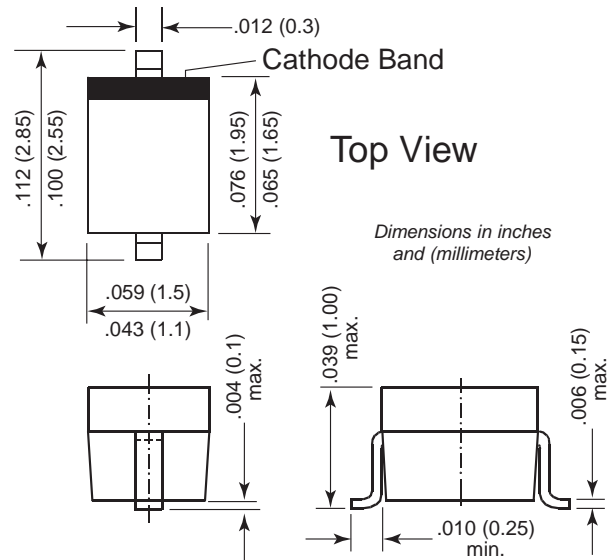
- . Cell Phone Handsets and Accessories
- . Microprocessor based equipment
- . Personal Digital Assistants (PDA's)
- . Notebooks, Desktops, and Servers
- . Portable Instrumentation
- . Pagers Peripherals

● MECHANICAL DATA

- . CASE: SOD-323 (SC-76), Molded Plastic
- . TERMINALS: UL 94V-0
- . POLARITY: See Diagrams Below
- . WEIGHT: 0.0045 gram
- . MOUNTING POSITION: Any

● MAXIMUM RATINGS

Rating 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



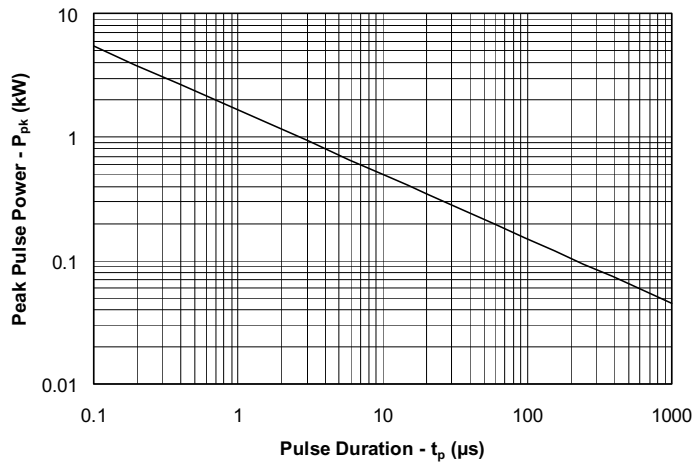
TYPE NUMBER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8 / 20 \mu s$)	P_{PK}	300	W
ESD Voltage (HBM Waveform per IEC 61000-4-2)	V_{ESD}	30	kV
Lead Soldering Temperature	T_L	260 (10 sec.)	°C
Operating Temperature Range	T_J	-55 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

● ELECTRICAL CHARACTERISTICS (T = 25°C)

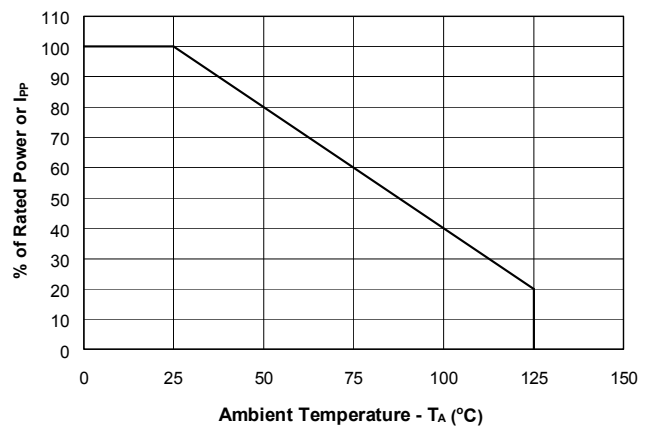
TYPE NUMBER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITIONS
Reverse Stand-Off Voltage	V_{RWM}	-	-	4	V	
Reverse Breakdown Voltage	V_{BR}	5	-	-	V	$I_t = 1mA$
Reverse Leakage Current	I_R	-	-	100	μA	$V_{RWM} = 3.3V$
Clamping Voltage	V_C	-	-	7	V	$I_{PP} = 1A, t_p = 8 / 20 \mu s$
		-	-	8.5		$I_{PP} = 5A, t_p = 8 / 20 \mu s$
Peak Pulse Current	I_{PP}	-	-	12	A	$t_p = 8 / 20 \mu s$
Junction Capacitance	C_j	-	-	350	pF	$V_R = 0V, f = 1MHz$

● ELECTRICAL CHARACTERISTIC CURVES

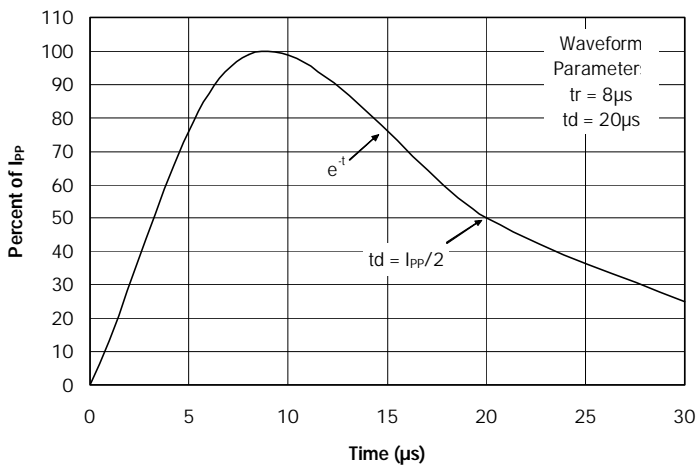
Non-Repetitive Peak Pulse Power vs. Pulse Time



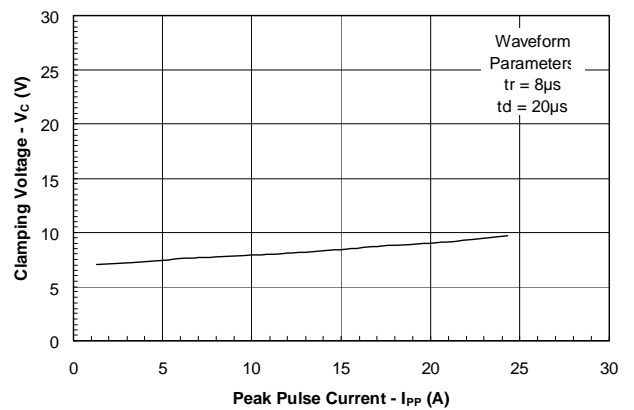
Power Derating Curve



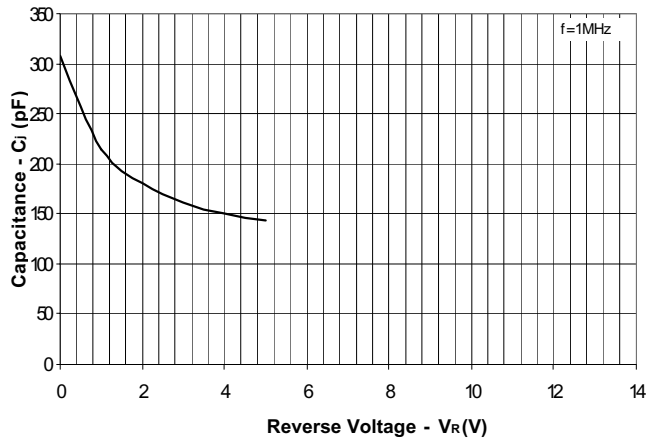
Pulse Waveform



Clamping Voltage vs. Peak Pulse Current



Capacitance vs. Reverse Voltage



Forward Voltage vs. Forward Current

