

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

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

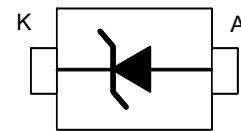
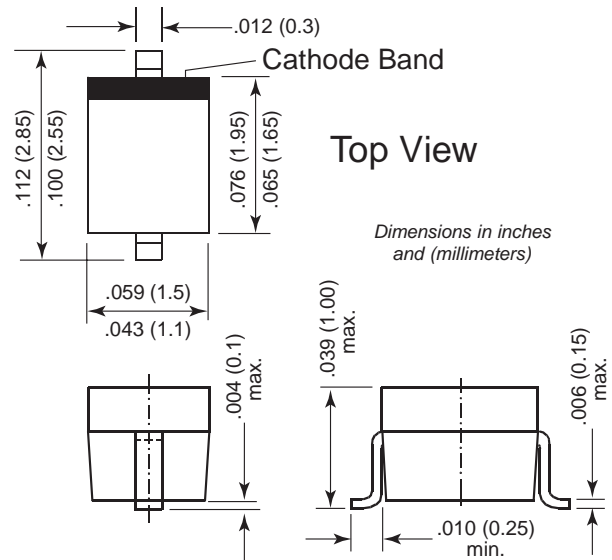


## ● APPLICATIONS

- . 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%.

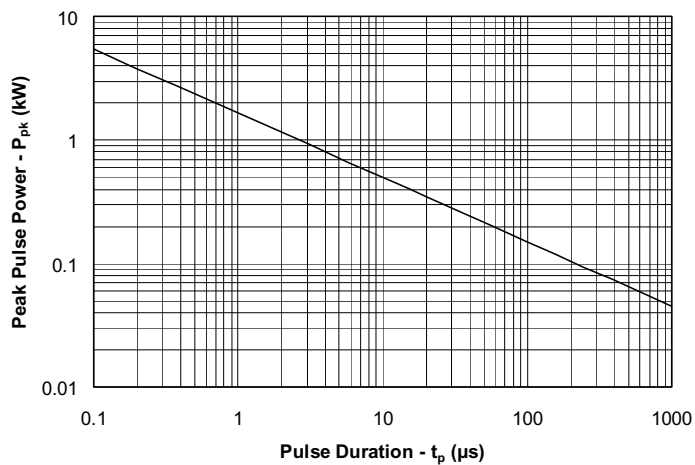
TYPE NUMBER	SYMBOL	VALUE	UNITS
Peak Pulse Power ( t <sub>p</sub> = 8 / 20 $\mu$ s )	P <sub>PK</sub>	300	W
ESD Voltage ( HBM Waveform per IEC 61000-4-2 )	V <sub>ESD</sub>	30	kV
Lead Soldering Temperature	T <sub>L</sub>	260 ( 10 sec. )	°C
Operating Temperature Range	T <sub>J</sub>	-55 ~ +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

## ● ELECTRICAL CHARACTERISTICS ( T = 25°C )

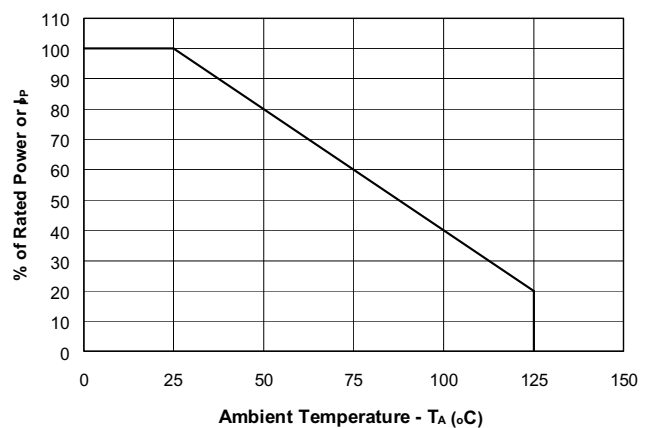
TYPE NUMBER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITIONS
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	5	V	
Reverse Breakdown Voltage	$V_{BR}$	6	-	-	V	$I_t = 1mA$
Reverse Leakage Current	$I_R$	-	-	10	$\mu A$	$V_{RWM} = 5V$
Clamping Voltage	$V_C$	-	-	9.8	V	$I_{PP} = 5A, t_p = 8 / 20 \mu s$
		-	-	14.5		$I_{PP} = 24A, t_p = 8 / 20 \mu s$
Peak Pulse Current	$I_{PP}$	-	-	24	A	$t_p = 8 / 20 \mu s$
Junction Capacitance	$C_j$	-	-	350	pF	$V_R = 0V, f = 1MHz$

## ● ELECTRICAL CHARACTERISTIC CURVES

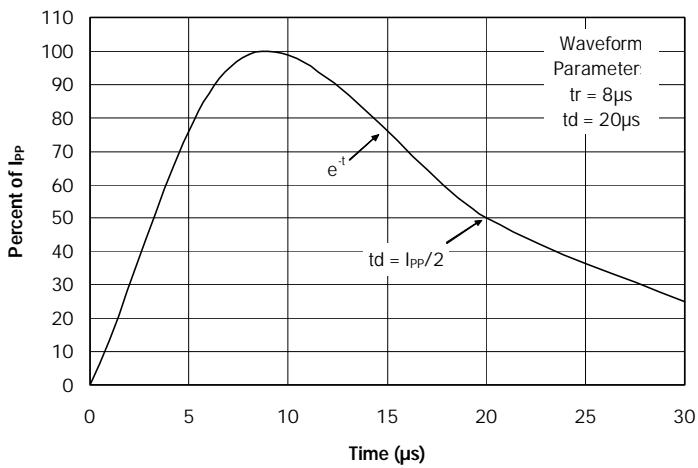
Non-Repetitive Peak Pulse Power vs. Pulse Time



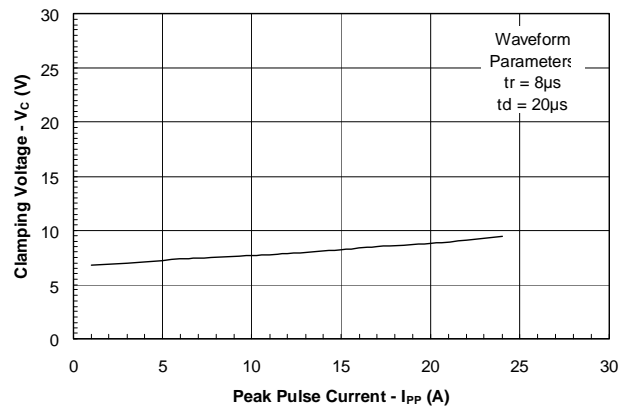
Power Derating Curve



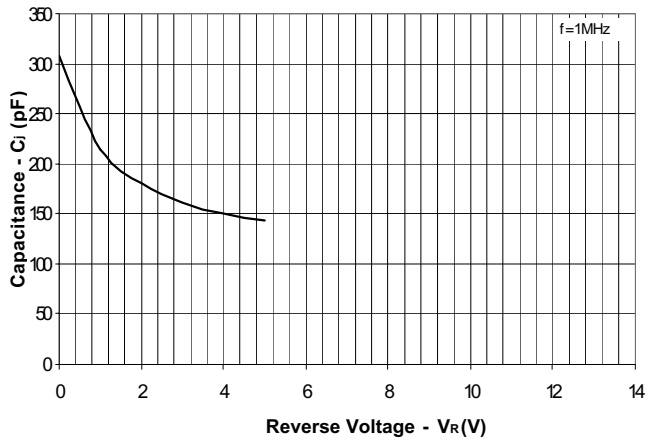
Pulse Waveform



Clamping Voltage vs. Peak Pulse Current



Capacitance vs. Reverse Voltage



Forward Voltage vs. Forward Current

