

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

SOD-323 ( SC-76 )

## FEATURES

- . 130 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

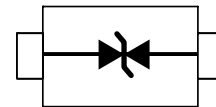
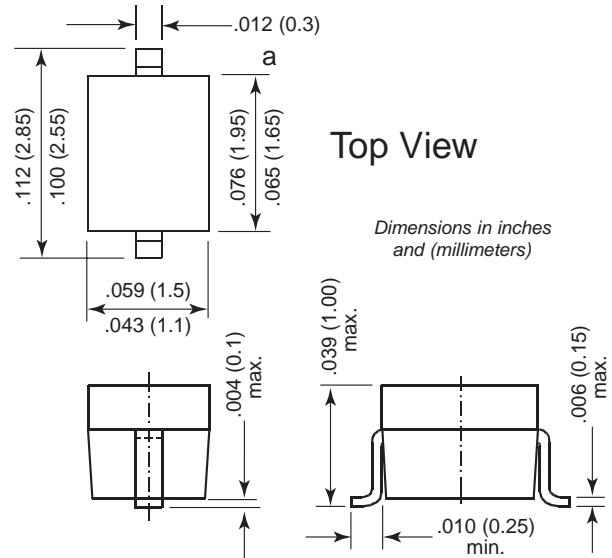


## APPLICATIONS

- . 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%.

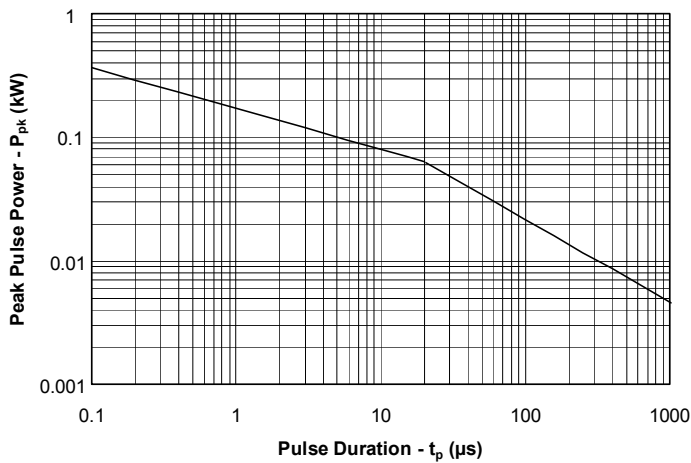
TYPE NUMBER	SYMBOL	VALUE	UNITS
Peak Pulse Power ( $t_p = 8 / 20 \mu s$ )	$P_{PK}$	130	W
ESD Voltage ( HBM Waveform per IEC 61000-4-2 Air)	$V_{ESD}$	15	kV
Lead Soldering Temperature	$T_L$	260 ( 10 sec. )	°C
Operating Temperature Range	$T_J$	-55 ~ +125	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C

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

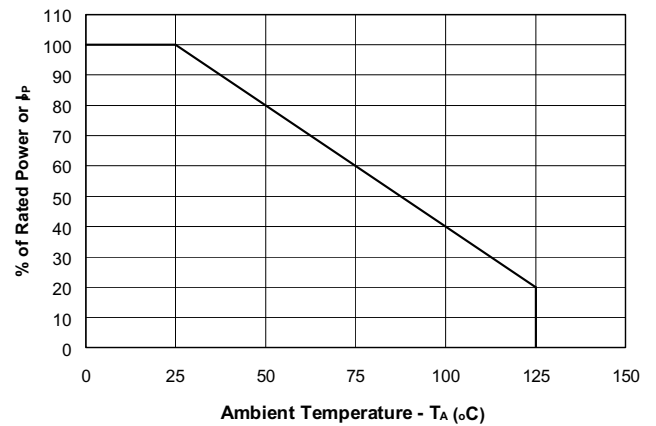
TYPE NUMBER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITIONS
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	5	V	
Reverse Breakdown Voltage	$V_{BR}$	5.6	-	9.4	V	$I_t = 1mA$
Reverse Leakage Current	$I_R$	-	-	90	nA	$V_{RWM} = 5V$
Clamping Voltage	$V_C$	-	-	10	V	$I_{PP} = 1A, t_p = 8 / 20 \mu s$
		-	-	14.5		$I_{PP} = 5A, t_p = 8 / 20 \mu s$
Peak Pulse Current	$I_{PP}$	-	-	5	A	$t_p = 8 / 20 \mu s$
Junction Capacitance	$C_j$	-	25	45	pF	$V_R = 0V, f = 1MHz$

### ● ELECTRICAL CHARACTERISTIC CURVES

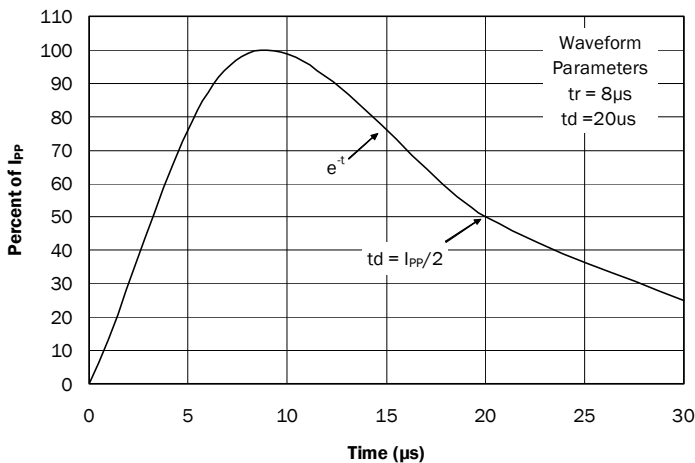
Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve



Pulse Waveform



Clamping Voltage vs. Peak Pulse Current

