

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

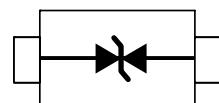
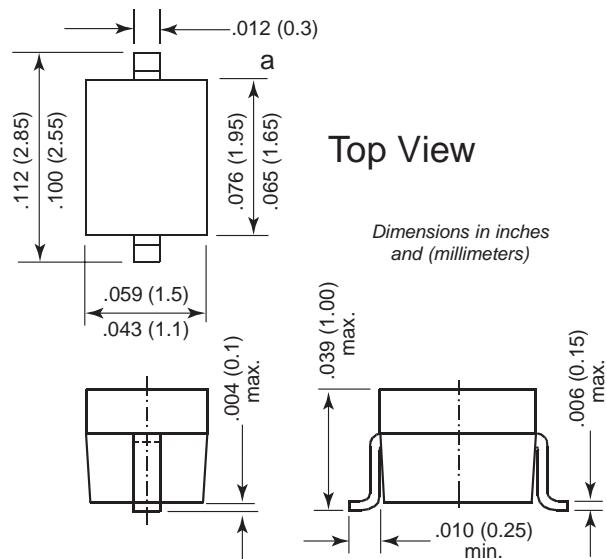


● APPLICATIONS

- . 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

SECO

Elektronische Bauelemente

SD05C

VOLTAGE: 5V

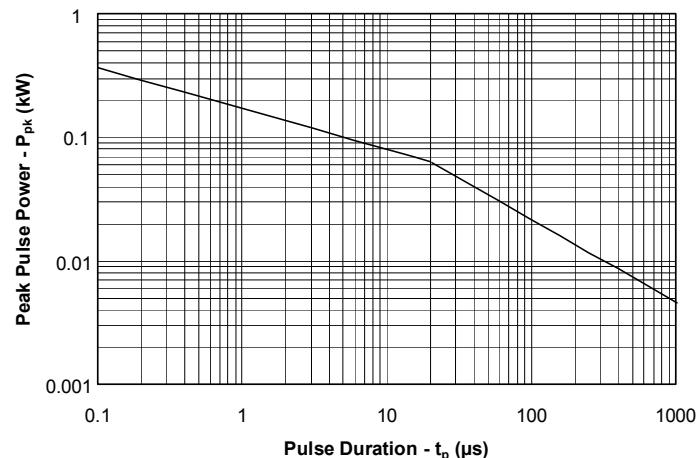
130W Bi-Direction Transient Voltage Suppressors Diode

●ELECTRICAL CHARACTERISTICS (T = 25°C)

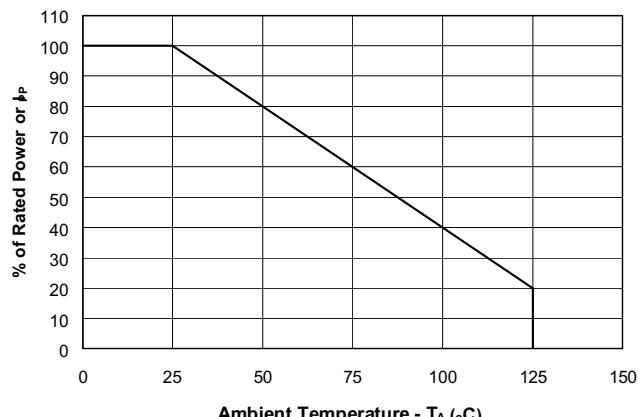
TYPE NUMBER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITIONS
Reverse Stand-Off Voltage	V_{RWM}	-	-	5	V	
Reverse Breakdown Voltage	V_{BR}	5.6	-	9.4	V	$I_t = 1\text{mA}$
Reverse Leakage Current	I_R	-	-	90	nA	$V_{RWM} = 5\text{V}$
Clamping Voltage	V_C	-	-	10	V	$I_{PP} = 1\text{A}, t_p = 8 / 20 \mu\text{s}$
	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

●ELECTRICAL CHARACTERISTIC CURVES

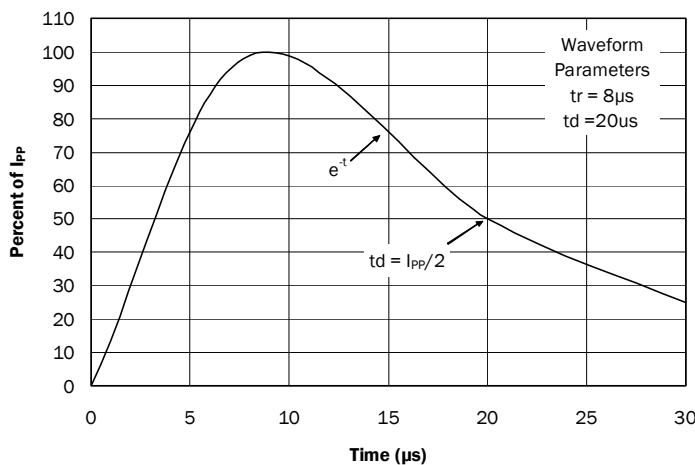
Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve



Pulse Waveform



Clamping Voltage vs. Peak Pulse Current

