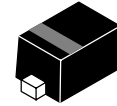


RoHS Compliant Product

SOD-523

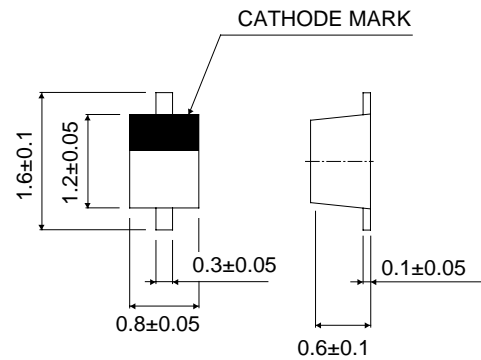
FEATURES

- * 120 Watts peak pulse power ($t_p = 8 / 20 \mu s$)
- * 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

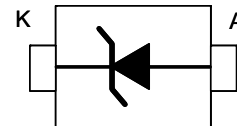
- * Cell Phone Handsets and Accessories
- * Microprocessor based equipment
- * Personal Digital Assistants (PDA's)
- * Notebooks, Desktops, and Servers
- * Portable Instrumentation
- * Pagers Peripherals



Dimensions in millimeters

MECHANICAL DATA

- * CASE: SOD-523 , Molded Plastic Epoxy Meets UL 94 V-0
- * TERMINALS: 100% Matte Sn
- * POLARITY: See Diagrams
- * WEIGHT: 0.0025 gram
- * MOUNTING POSITION: Any
- * MARKING: Z6



MAXIMUM RATINGS

Rating 25 °C ambient temperature unless otherwise specified.

TYPE NUMBER	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p = 8 / 20 \mu s$)	P_{PK}	120	W
ESD Voltage (HBM Waveform per IEC 61000-4-2)	V_{ESD}	16	kV
Lead Soldering Temperature	T_L	260 (10 sec.)	°C
Operating Temperature Range	T_J	-55 ~ +150	°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}	6.5	-	-	V	$I_t = 1mA$
Reverse Leakage Current	I_R	-	-	0.5	μA	$V_{RWM} = 5V$
Clamping Voltage	V_C	-	-	9.8	V	$I_{PP} = 5A, t_p = 8 / 20 \mu s$
		-	-	18		$I_{PP} = 9A, t_p = 8 / 20 \mu s$
Peak Pulse Current	I_{PP}	-	-	9	A	$t_p = 8 / 20 \mu s$
Junction Capacitance	C_j	-	-	150	pF	$V_R = 0V, f = 1MHz$

ELECTRICAL CHARACTERISTIC CURVES

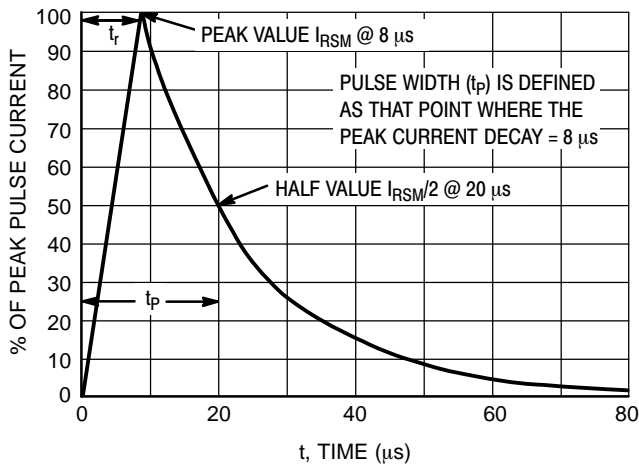


Figure 1. 8 x 20 μs Pulse Waveform