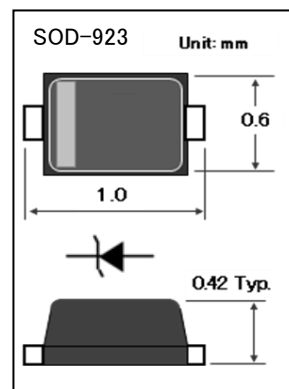


- ◇ Low Clamping Voltage Of Transient Voltage Suppressor
- ◇ ESD Protection, IEC61000-4-2 Level 4
- ◇ SOD-923 Micro SMD Package
- ◇ Rohs Compliant
- ◇ UL-94 V-0 / Green EMC
- ◇ Matte Tin Lead Finish (Pb-Free)
- ◇ Cathode Band / Device Marking

Device Marking Code	
ESD9D5.0	E



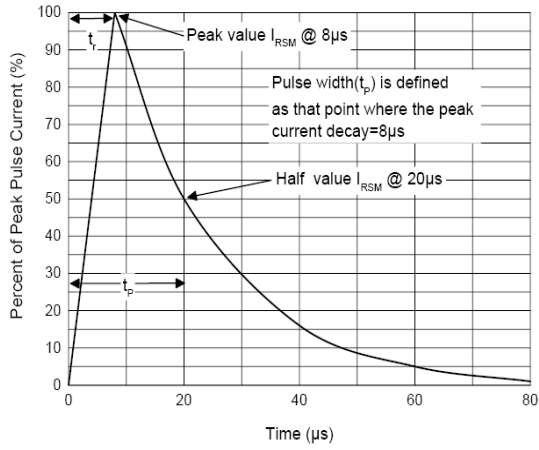
Absolute Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
P_{pK}	Peak Power Dissipation	70	W
$V_{ESD-Air}$	ESD Voltage IEC61000-4-2 Air	± 15	kV
$V_{ESD-contact}$	ESD Voltage IEC61000-4-2 Contact	± 8	kV
T_J	Junction Temperature	150	°C
T_L	Lead Temperature	260	°C
T_{STG}	Storage Temperature	-55 to +150	°C
P_D	Power Dissipation	100	mW

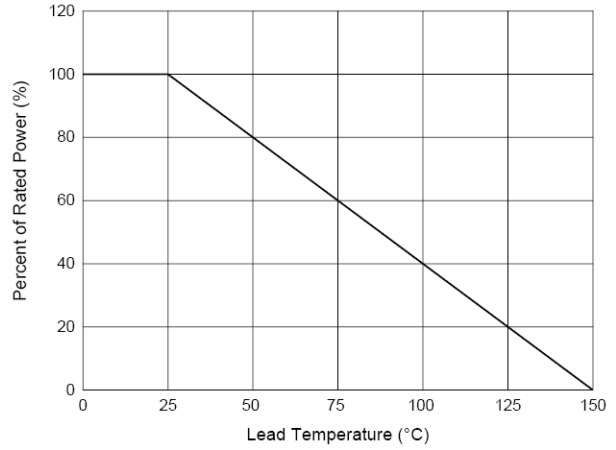
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	-			5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	6.2			V
I_R	Reverse Current	$V_{RWM} = 5V$			1.0	μA
V_F	Forward Voltage	$I_F = 10mA$			0.9	V
V_C	Clamping Voltage	$I_{pp} = 1A, t_p = 8/20 \mu s$			9	V
V_C	Clamping Voltage	$I_{pp} = 5A, t_p = 8/20 \mu s$			11	V
C_D	Diode Capacitance	$V_R = 0V, f = 1MHz$		40		pF

Typical characteristics



8 X 20 μs Pulse Waveform



Pulse Derating Curve

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
ESD5.0XM9	SOD-923	Tape & Reel 8000pcs /7" Reel	8 mm	2 mm	Conductive	

Package Dimensions

Package outline : SOD923

SOD923 * Package Outline

Unit	A	B	C	D	E	F	G
Max.	0.90	0.20	0.15	0.30	1.10	0.45	0.65
Min.	0.70	0.05	0.05	0.15	0.90	0.39	0.55

Note:

1. Halogen free,EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: Cu
5. Other Tolerance: ± 0.05
6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
7. Unit: mm

Land Pattern Recommendation