

M·C·C

Micro Commercial Components



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ESD7V0D9

Features

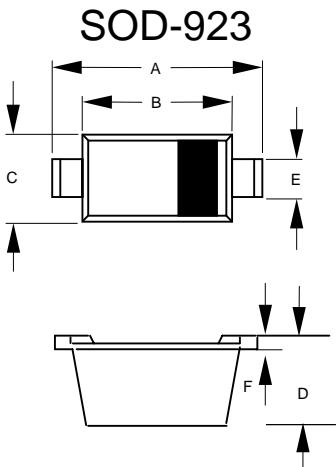
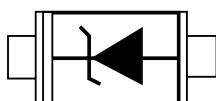
- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- Fast response ,response time less than 1ns.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction &StorageTemperature: -55°C to +150°C

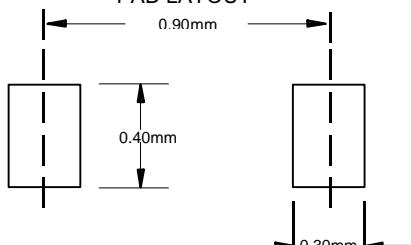
Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±15 ±8	KV
ESD Voltage per human body mode		16	KV
Peak Pulse Power(8/20us)	Ppp	100	w

Pin Configuration-Top View



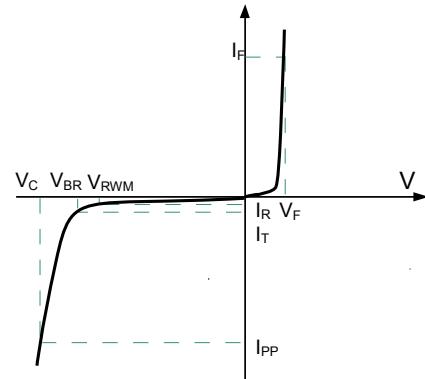
DIM	DIMENSIONS				NOTE
	INCHES	MIN	MAX	MM	
A	.037	.041		0.95	1.05
B	.030	.033		0.75	0.85
C	.022	.026		0.55	0.65
D	.014	.017		0.36	0.43
E	.006	.010		0.15	0.25
F	.003	.007		0.07	0.17

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter
I _{PP}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Maximum Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
I _T	Test Current
C	Capacitance @ V _R =0 and f =1MHz



Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Working Voltage	V _{RWM}				7	V
Breakdown Voltage	V _{BR}	I _t =1mA	8			V
Reverse Leakage Current	I _R	V _{RWM} =7V			1	µA
Forward Voltage	V _F	I _F =10mA		0.8		V
Clamping Voltage	V _C	I _{PP} =1A t _P =8/20µS			10.0	V
Clamping Voltage	V _C	I _{PP} =5A t _P =8/20µS			14.8	V
Junction Capacitance	C _j	V _R =0V f=1MHz	25	30		pF
Junction Capacitance	C _j	V _R =2.5V f=1MHz	18	25		pF

Typical Characteristics

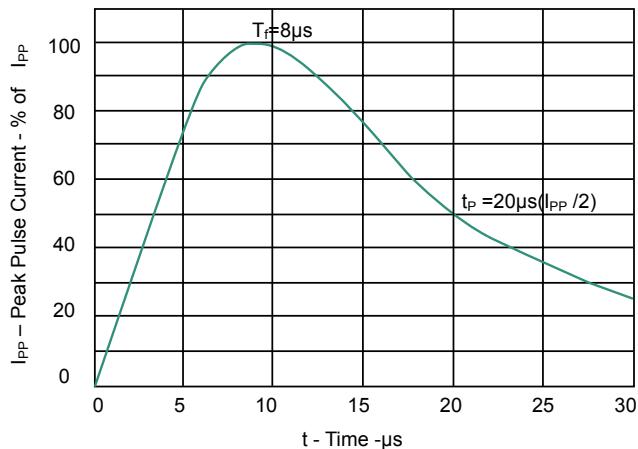


Fig 1.Pulse Waveform

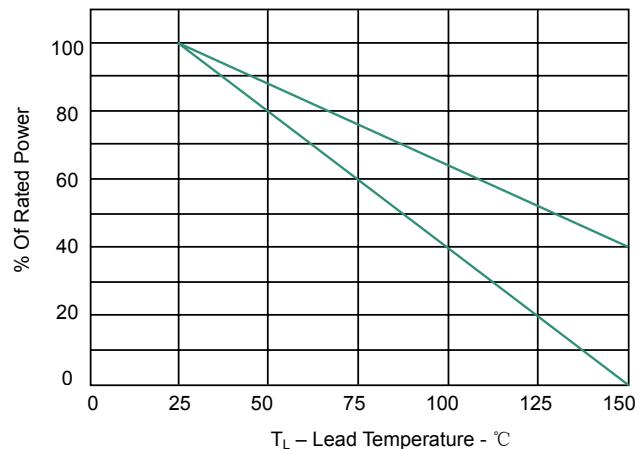


Fig 2.Power Derating Curve



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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