

PJSD03TM ~ PJSD15TM

ESD PROTECTION DIODES

FEATURES

- IEC61000-4-2 Level 4 ESD Protection
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

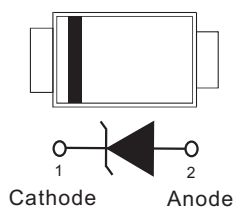
MECHANICAL DATA

Case: SOD-923, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

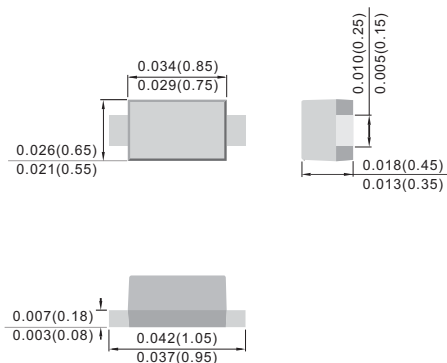
Polarity : Color band cathode

Approx.Weight : 0.00002 ounces, 0.0005grams



SOD-923

Unit : inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation (8/20μs Waveform)	P_{PP}	40	W
Lead Solder Temperature-Maximum (10 Second Duration)	T_L	260	°C
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

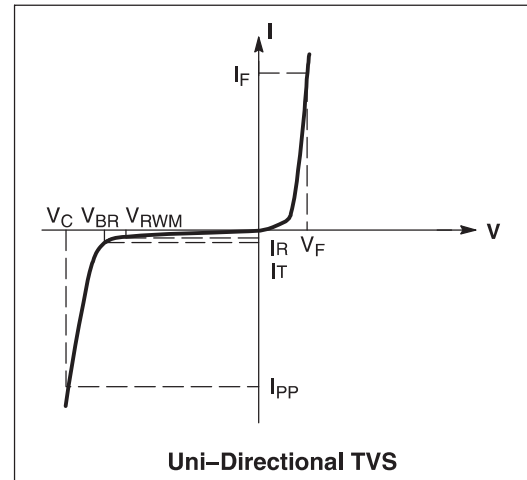
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Note : 1.FR-4 = 70 x 60 x 1mm.

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

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



ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted, V_F=1.1V Max.@I_F=10mA)

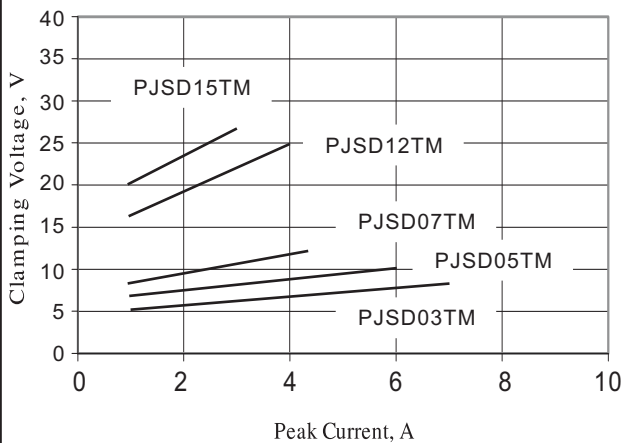
Part Number	V _{RWM}	I _R @V _{RWM}	V _{BR} @I _T (Note 2)	C _J (Note 3)	V _C	I _{PP}	I _T	Marking
	Max.	Max.	Min.	Max.	Max Per 8x20μs			
	V	μA	V	pF	V			
PJSD03TM	3.3	2.5	5.4	50	10	6	1.0	h
PJSD05TM	5	1	6.2	35	12	5	1.0	b
PJSD07TM	7	5	7.5	30	15	4	1.0	c
PJSD12TM	12	1	13.3	18	23	3	1.0	d
PJSD15TM	15	1	17.0	15	30	2	1.0	e

Note : 2.V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C

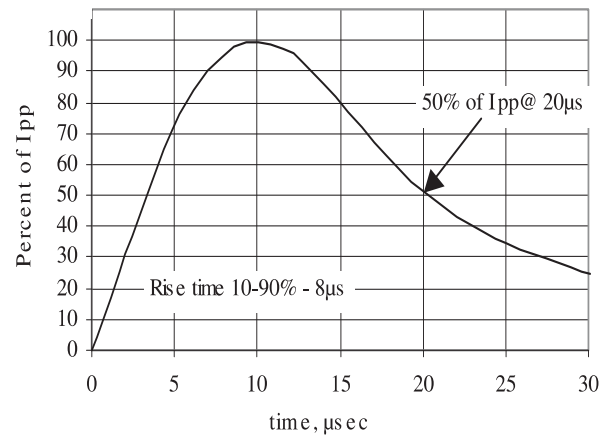
3.Capacitance at f=1MHz, V_R=0V, T_A=25°C

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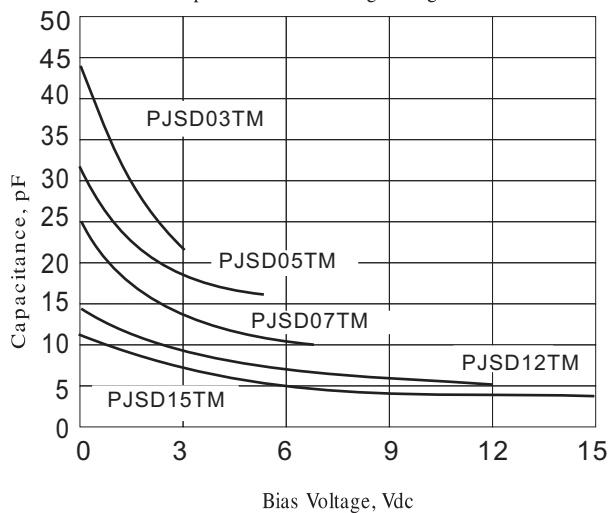
Clamping voltage vs Ipp8/20μs Surge



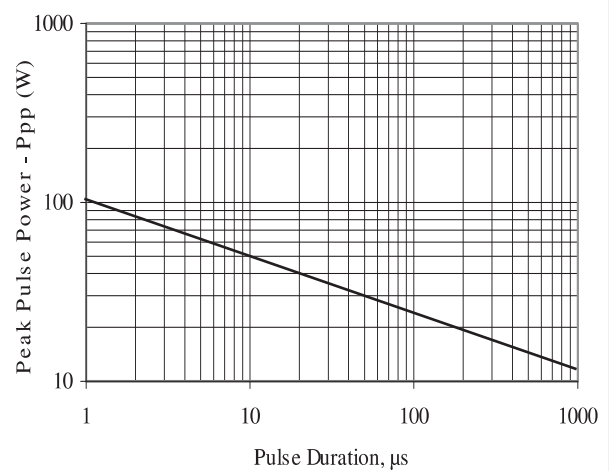
Surge Pulse Waveform Definition



Capacitance vs. Biasing Voltage @1MHz



Non-Repetitive Peak Pulse Power vs Pulse Time

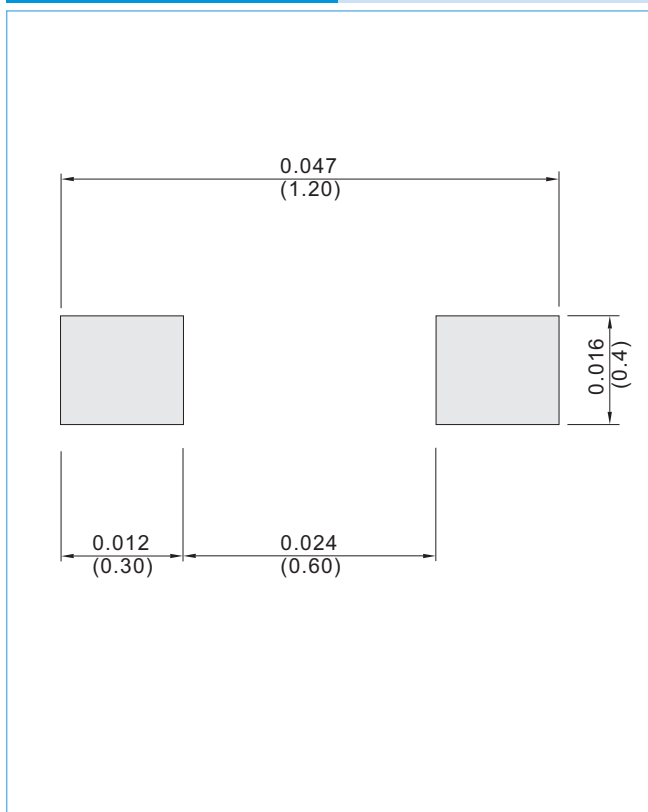


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MOUNTING PAD LAYOUT

SOD-923

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 8K per 7" plastic Reel

LEGAL STATEMENT

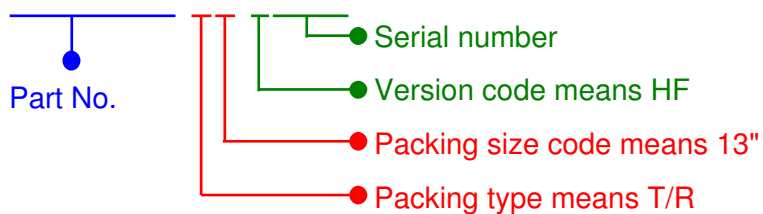
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For example :

RB500V-40_R2_00001



Part No_packing code_Version

PJSD03TM_R1_00001

PJSD03TM_R1_10001

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			