

PJSD03TM ~ PJSD15TM

ESD PROTECTION DIODES

FEATURES

- IEC61000-4-2(ESD): $\pm 30\text{kV}$ Air, $\pm 30\text{kV}$ Contact
($\pm 15\text{kV}$ Air, $\pm 15\text{kV}$ Contact for 15V)
- IEC61000-4-4(EFT): 40A(5/50nS)
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

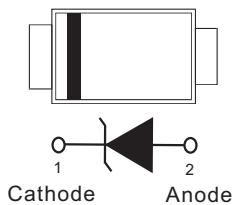
MECHANICAL DATA

Case: SOD-923, Plastic

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

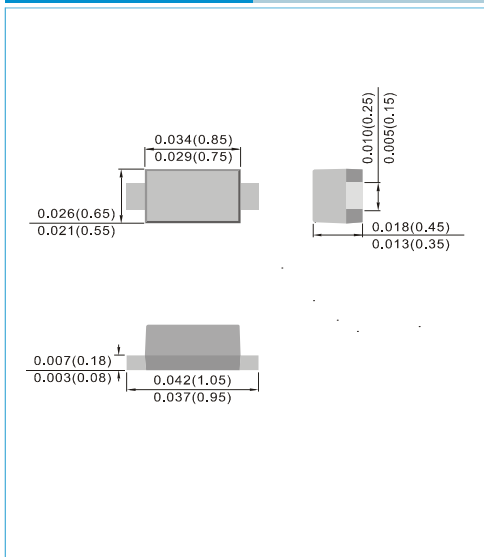
Polarity: Color band denotes cathode end

Approx.Weight: 0.00002 ounce, 0.0005 gram



SOD-923

Unit : inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation (8/20 μ s Waveform)	PPP	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

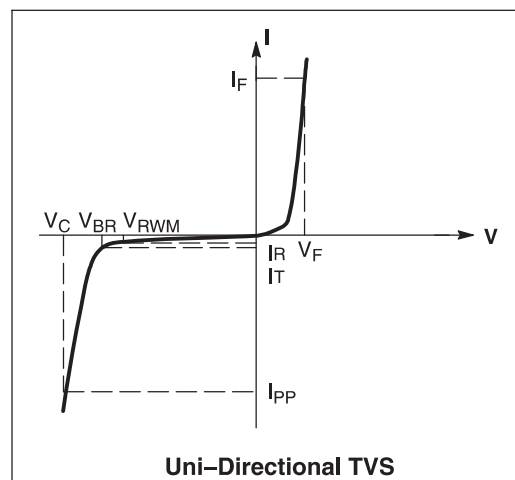
Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

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

PJSD03TM ~ PJSD15TM

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)

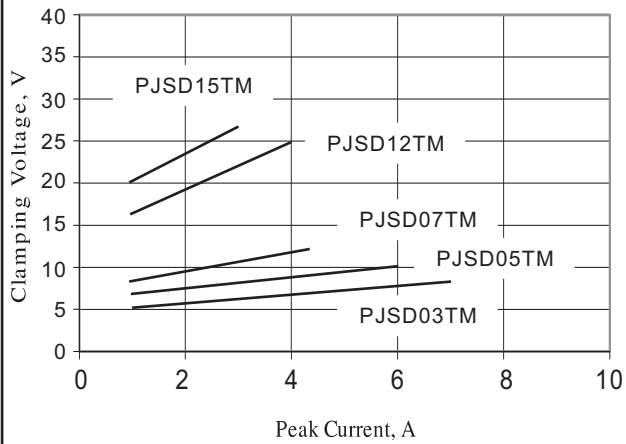
Part Number	V _{RWM}	I _R @V _{RWM}	V _{BR} @I _T (Note 2)	C _J (Note 3)	V _C	I _{PP}	I _T	Marking
	Max.	Max.	Min.	Max.	Max Per 8x20μs			
	V	μA	V	pF	V			
PJSD03TM	3.3	2.5	5.4	50	10	6	1.0	h
PJSD05TM	5	1	6.2	35	12	5	1.0	b
PJSD07TM	7	5	7.5	30	15	4	1.0	c
PJSD12TM	12	1	13.3	18	23	3	1.0	d
PJSD15TM	15	1	17.0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

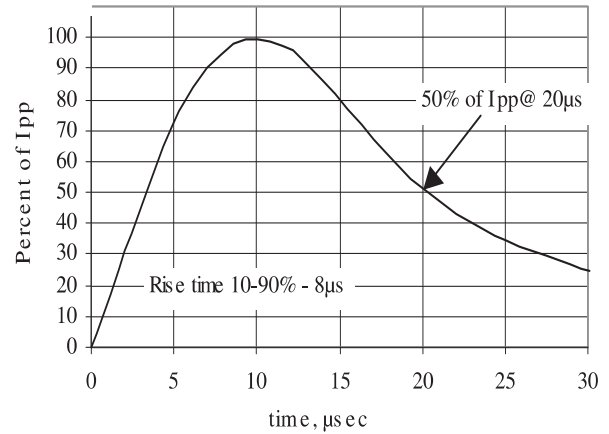
3.Capacitance at f=1MHz, V_R=0V, T_A=25°C

PJSD03TM ~ PJSD15TM

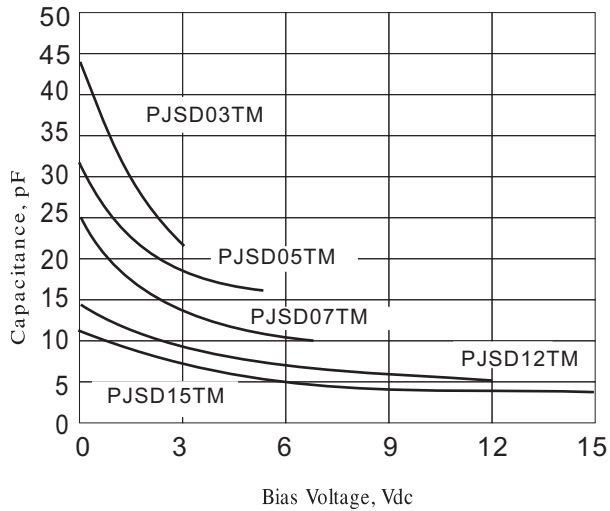
Clamping voltage vs Ipp8/20μs Surge



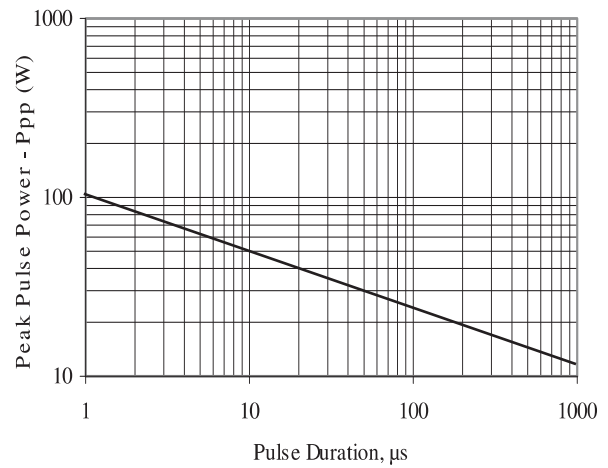
Surge Pulse Waveform Definition



Capacitance vs. Biasing Voltage @1MHz

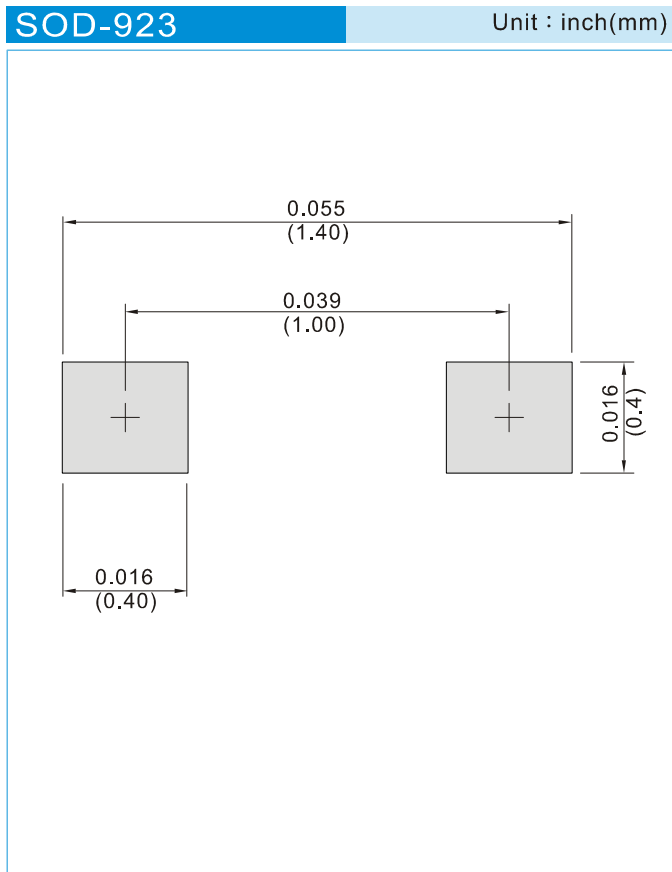


Non-Repetitive Peak Pulse Power vs Pulse Time



PJSD03TM ~ PJSD15TM

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

PJSD03TM ~ PJSD15TM

Part No_packing code_Version

PJSD03TM_R1_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



PJSD03TM ~ PJSD15TM

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[PJSD15TM_R1_00001](#)