

PJEC24MTA

LOW CAPACITANCE DOUBLE BIDIRECTIONAL ESD PROTECTION DIODES

VOLTAGE 24 Volts **IPP** 4 Amperes

SOT-23

Unit : inch(mm)

FEATURES

- ESD protection of two lines
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case : SOT-23, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0003 ounces, 0.0084 grams
- Marking : 12A

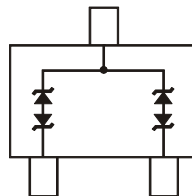
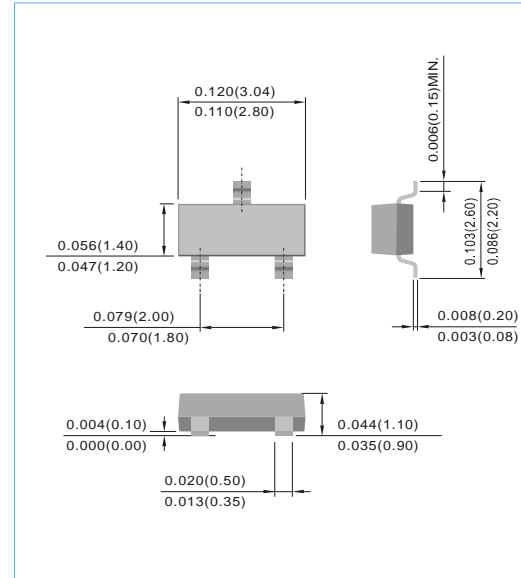


Fig.84(TOP VIEW)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating	Symbol	Value	Units
Peak Pulse Current on 8/20μs waveform (Notes 1,2,3)	I_{PPM}	4	Amps
ESD Voltage Air Mode	V_{ESD}	20	KV
ESD Voltage Contact Mode	V_{ESD}	20	KV
Operating Temperature And Storage Temperature	T_J, T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage (Notes 4)	V_{RWM}	-	-	-	24	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=5mA$	25.4	-	30.3	V
Reverse Leakage Current	I_R	$V_R=24V$	-	-	50	nA
Clamping Voltage (8/20μs)	V_C	$I_{PP}=4A$	-	-	50	V
Off State Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	11	-	pF

NOTES :

1. Non-repetitive current pulse.
2. Mounted on copper pads to each terminal.
3. Peak pulse power waveform is 8/20μs.
4. A transient suppressor is selected according to the working peak reverse voltage (V_{RWM}), which should be equal to or greater than the DC or continuous peak operating voltage level.

PJEC24MTA

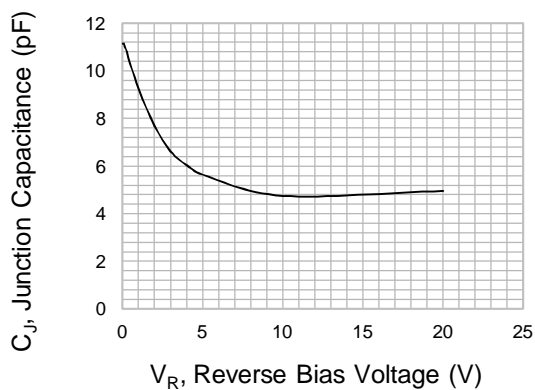


Fig.1 Typical Junction Capacitance

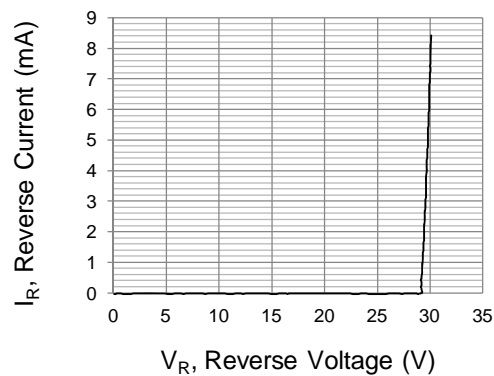


Fig.2 Typical Reverse Characteristics

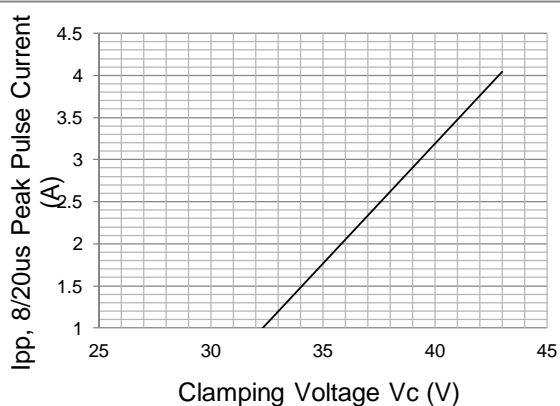


Fig.3 Typical Peak Clamping Voltage

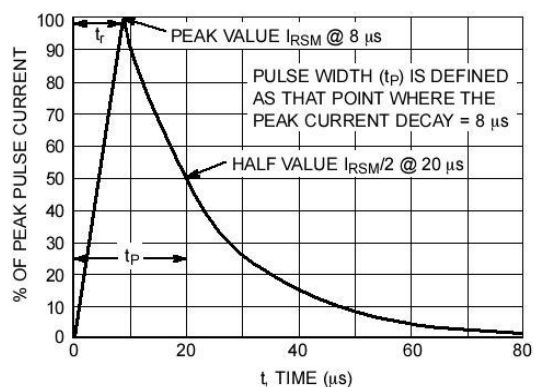


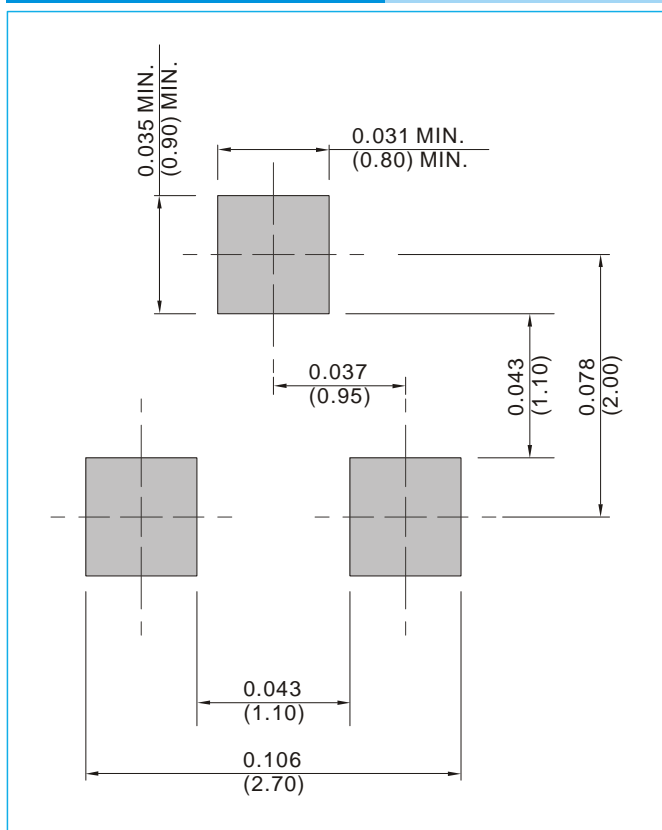
Fig.4 8/20μS Peak Pulse Current Waveform

PJEC24MTA

MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

PJEC24MTA

Part No_packing code_Version

PJEC24MTA_R1_00001

PJEC24MTA_R2_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			



PJEC24MTA

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.