

# PJEC24MTA-AU

## LOW CAPACITANCE DOUBLE BIDIRECTIONAL ESD PROTECTION DIODES

**VOLTAGE** 24 Volt **IPP** 4 Ampere

**SOT-23** Unit : inch(mm)

### FEATURES

- ESD protection of two lines
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- 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

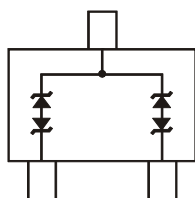
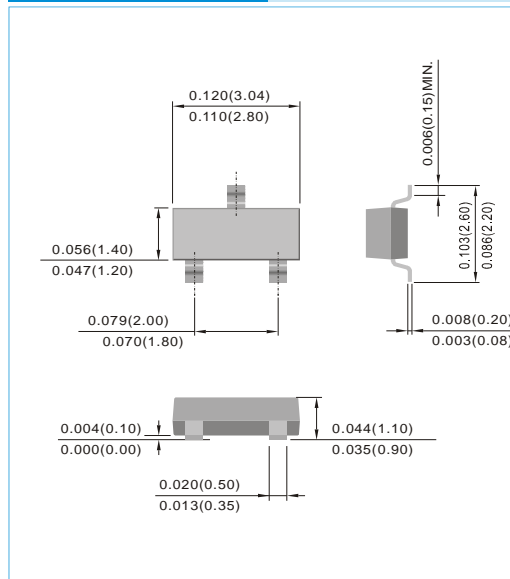


Fig.84(TOP VIEW)



## 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

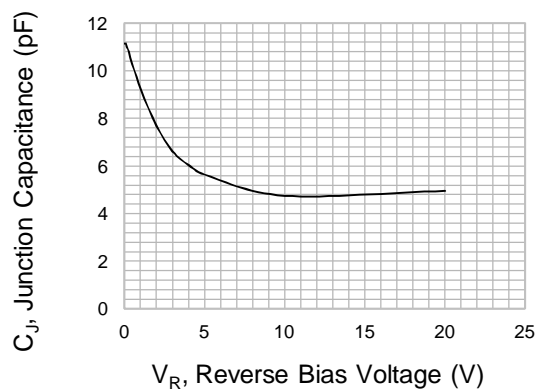
## ELECTRICAL CHARACTERISTICS

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

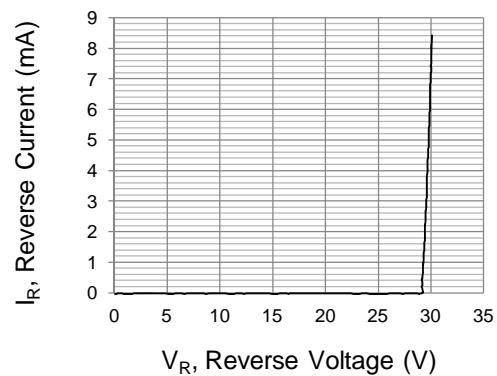
### NOTES :

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.

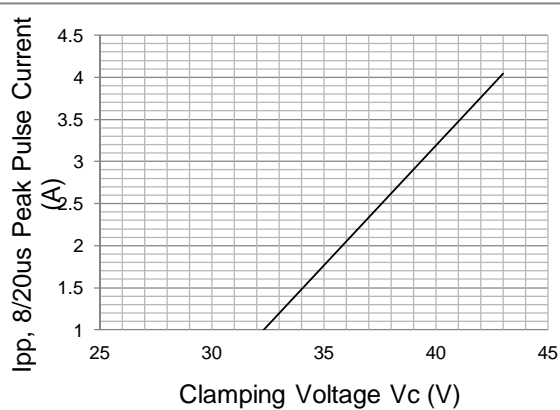
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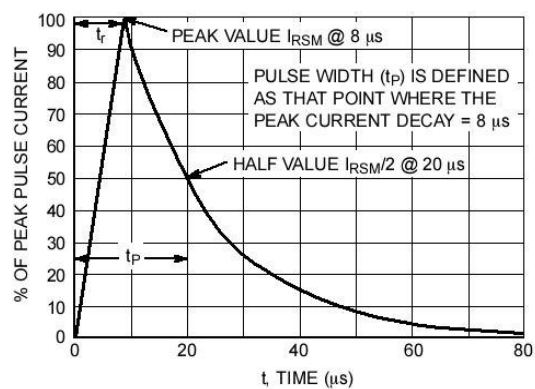
**Fig.1 Typical Junction Capacitance**



**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Peak Clamping Voltage**



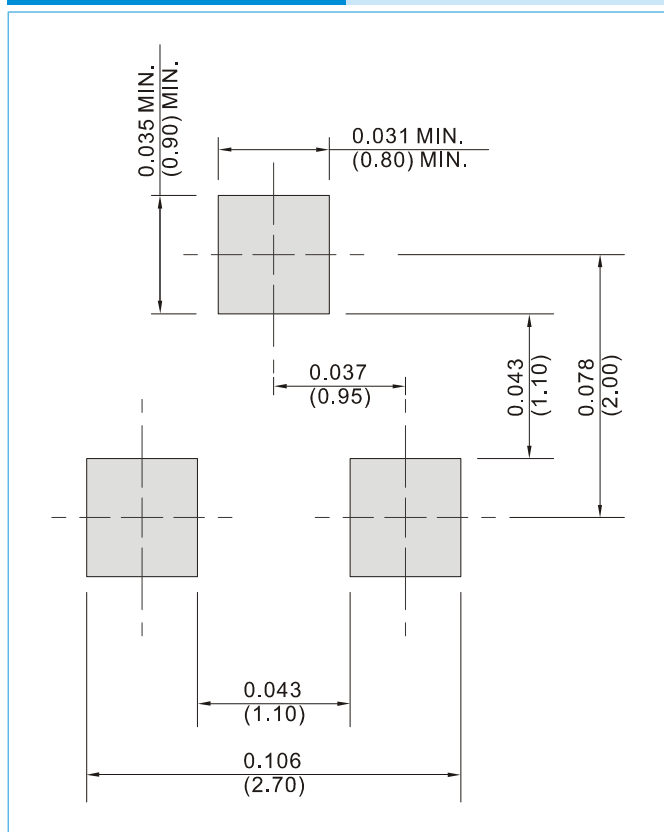
**Fig.4 8/20μS Peak Pulse Current Waveform**

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## 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

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