

# PJMBZ15C-AU / PJMBZ27C-AU Series

## ESD Protection

**Voltage**

**15 / 27 V**

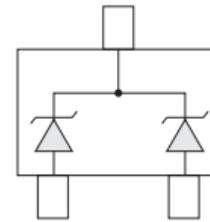
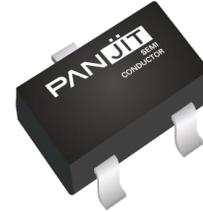
## Features

- ISO10605(C=330pF, R=330Ω) : ±30kV Air, ±30kV Contact
- HBM ≥ ±8KV & CDM ≥ ±2KV
- 40W Peak Power Rating @1ms(Unidirectional)
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

## Mechanical Data

- Case : SOT-23 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0084 grams

SOT-23



## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power 10/1000us Waveform	P <sub>PP</sub>	40	W
ESD IEC61000-4-2(Air)	V <sub>ESD</sub>	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Typical Thermal Resistance <sup>(Note 1)</sup>	R <sub>θJA</sub>	350	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

## PJMBZ15C-AU / PJMBZ27C-AU Series

### Electrical Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PJMBZ15C-AU						
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage <sup>(Note 2)</sup>	V <sub>RWM</sub>	-	-	-	12	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BT</sub> = 1mA, Any I/O pins to GND	14.25	15	15.75	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 12V, Any I/O pins to GND	-	-	0.05	uA
Clamping Voltage	V <sub>CL</sub>	I <sub>PP</sub> = 1.9A, t <sub>P</sub> = 10/1000us, Any I/O pins to GND	-	-	21	V

PJMBZ27C-AU						
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage <sup>(Note 2)</sup>	V <sub>RWM</sub>	-	-	-	22	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BT</sub> = 1mA, Any I/O pins to GND	25.65	27	28.35	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 22V, Any I/O pins to GND	-	-	0.05	uA
Clamping Voltage	V <sub>CL</sub>	I <sub>PP</sub> = 1A, t <sub>P</sub> = 10/1000us, Any I/O pins to GND	-	-	40	V

**NOTES :**

1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. A transient suppressor is selected according to the working peak reverse voltage(V<sub>RWM</sub>), which should be equal to or greater than the DC or continuous peak operation voltage level.

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## TYPICAL CHARACTERISTIC CURVES

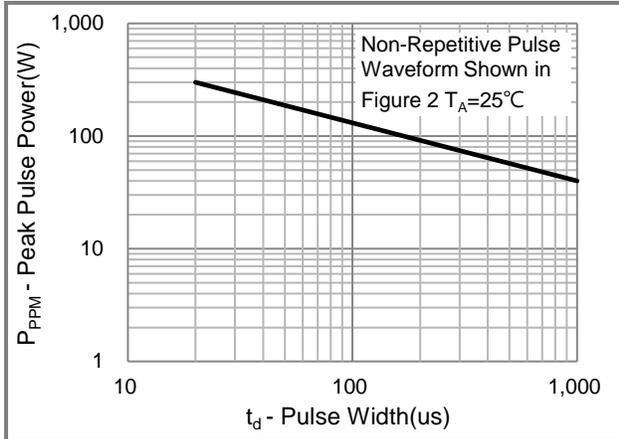


Fig.1 Pulse Power Rating Curve

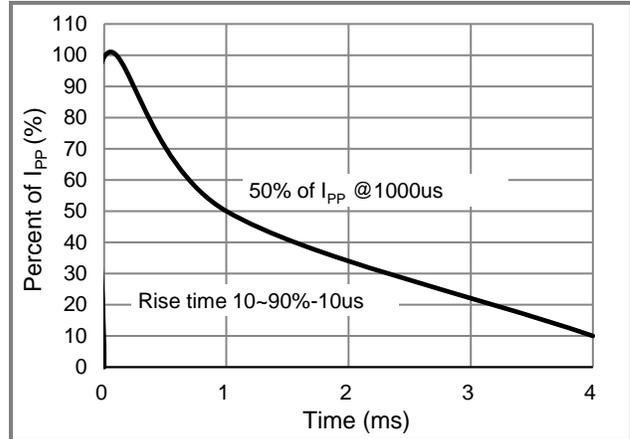


Fig.2 Pulse Waveform

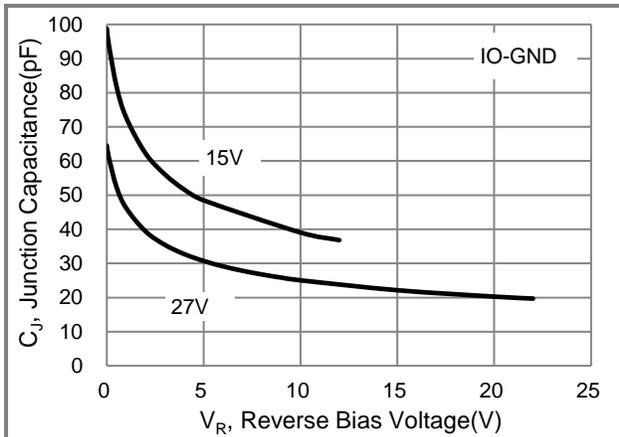


Fig.3 Typical Junction Capacitance

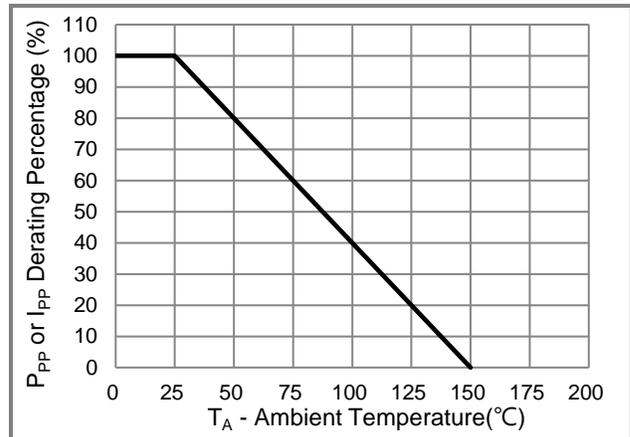


Fig.4 Derating Curve

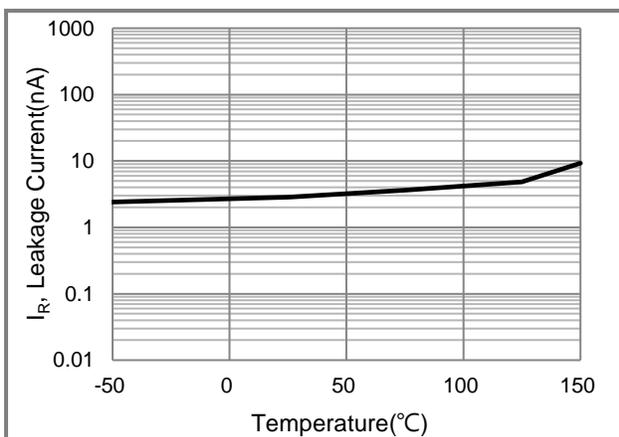


Fig.5 Typical Reverse Characteristics

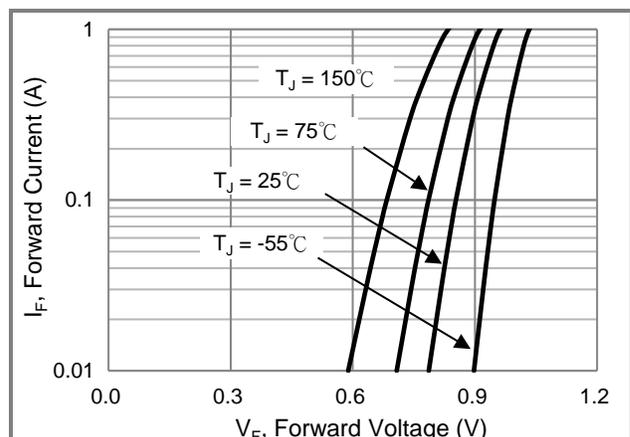


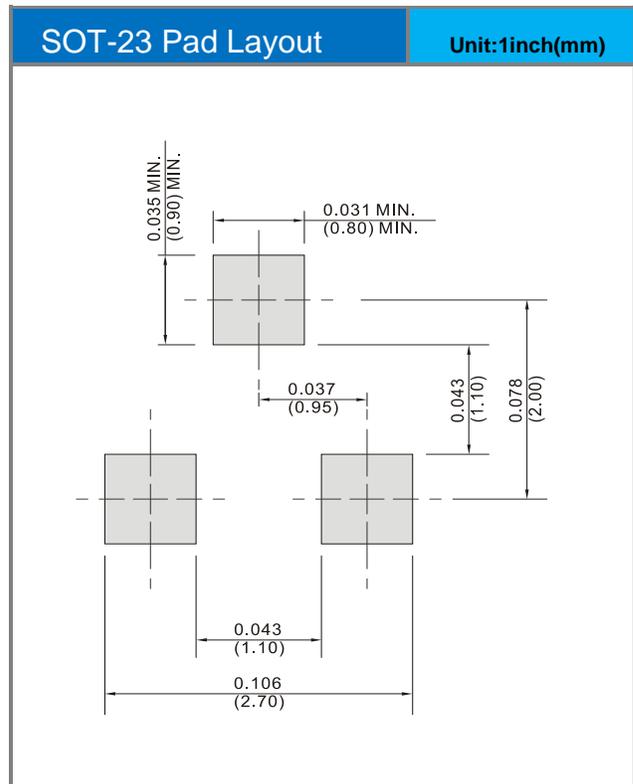
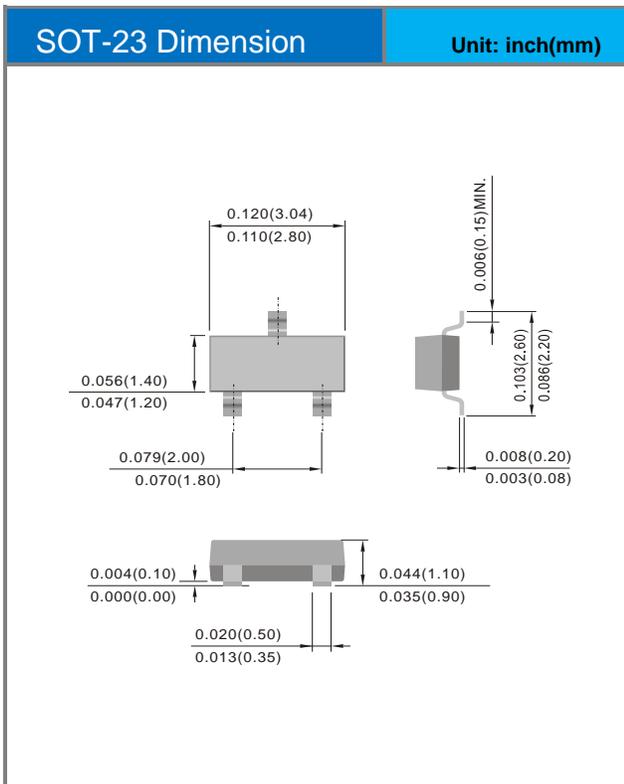
Fig.6 Typical Forward Characteristics

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PJMBZ15C-AU	SOT-23	3K pcs / 7" reel	AAB
PJMBZ27C-AU	SOT-23	3K pcs / 7" reel	AAC

## Packaging Information & Mounting Pad Layout



## **PJMBZ15C-AU / PJMBZ27C-AU Series**

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