

# PEC4224C2A-AU

## ESD Protection

**Voltage**

**24 V**

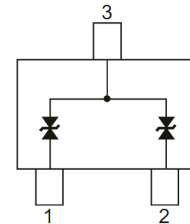
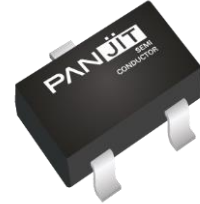
## Features

- ISO10605(C=330pF, R=330Ω) : ±30kV Air, ±30kV Contact
- HBM ≥ ±8KV & CDM ≥ ±2KV
- IEC61000-4-5(Lightning) : 7A(8/20uS)
- 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
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

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

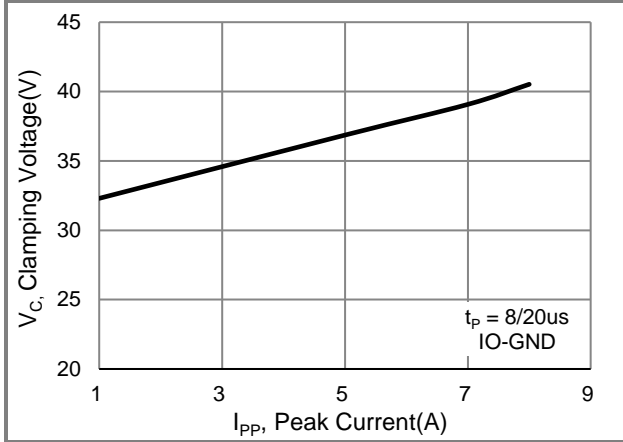
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage <sup>(Note 2)</sup>	V <sub>RWM</sub>	-	-	-	24	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 1 mA	26.7	-	34.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 24 V	-	-	50	nA
Clamping Voltage	V <sub>CL</sub>	I <sub>PP</sub> = 1 A, t <sub>P</sub> = 8/20 us	-	32	39	V
		I <sub>PP</sub> = 7 A, t <sub>P</sub> = 8/20 us	-	39	47	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias f = 1 MHz	-	-	50	pF

NOTES :

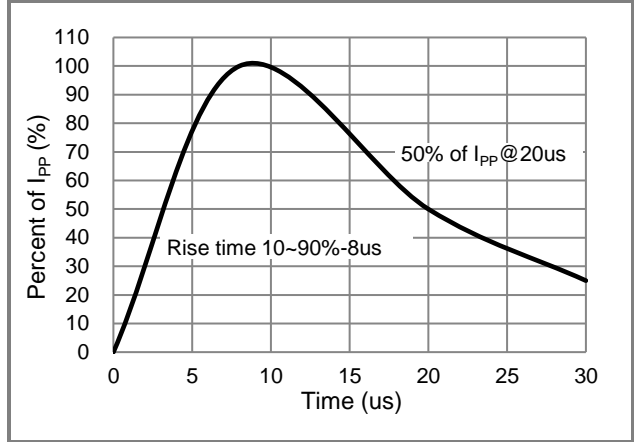
1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. A transient suppressor is selected according to the working peak reverse voltage(V<sub>RWM</sub>), which should be equal to or greater than the DC or continuous peak operation voltage level.
3. Not applicable to parts with V<sub>RWM</sub> lower than battery voltage.

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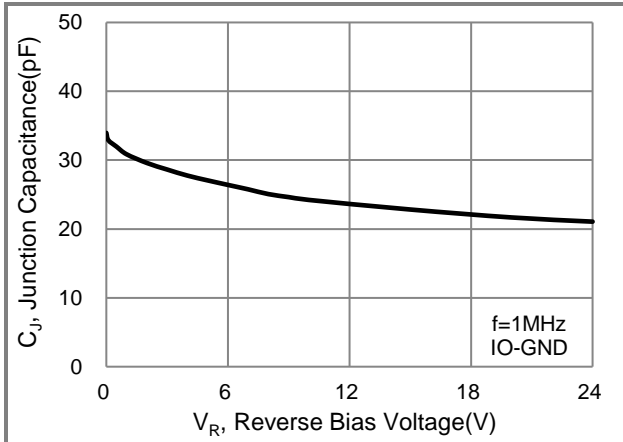
## TYPICAL CHARACTERISTIC CURVES



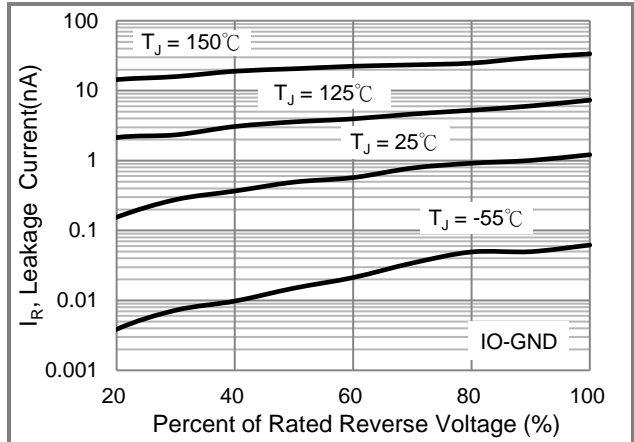
**Fig.1 Typical Peak Clamping Voltage**



**Fig.2 Pulse Waveform**



**Fig.3 Typical Junction Capacitance**



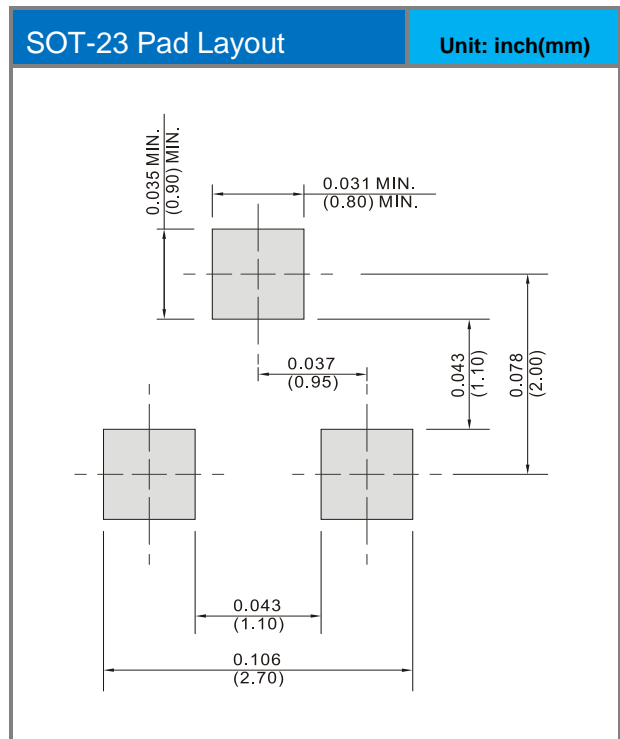
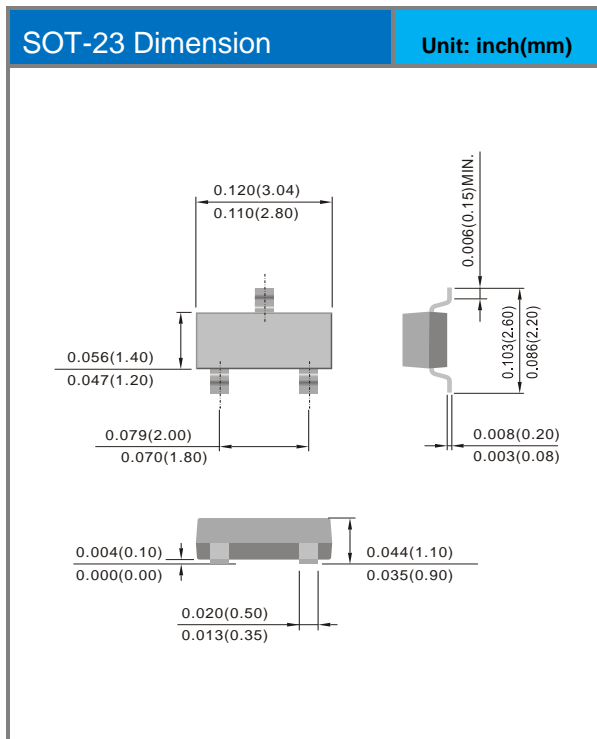
**Fig.4 Typical Reverse Characteristics**

# PEC4224C2A-AU

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PEC4224C2A-AU	SOT-23	3K pcs / 7" reel	AAG

## Packaging Information & Mounting Pad Layout



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