



PEC33712C2A-AU

ESD PROTECTION

Voltage

7 V / 12 V

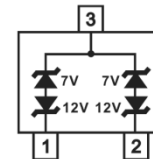
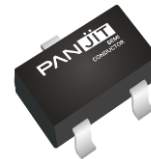
Features

- Protects two +12V to -7V line
- IEC61000-4-2(ESD): ± 30 kV Air, ± 30 kV Contact
- IEC61000-4-4(EFT): 40 A(5/50 ns)
- IEC61000-4-5(Lightning): 5A(8/20 μ S)
- Low clamping voltage
- 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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V_{ESD}	± 30	kV
ESD IEC61000-4-2(Contact)		± 30	
Operating Junction Temperature Range	T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^\circ\text{C}$



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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	$V_{RWM}^{(1)}$	Pin1 to Pin3 or Pin2 to Pin3	-	-	12	V
		Pin3 to Pin1 or Pin3 to Pin2	-	-	7	
Reverse Breakdown Voltage	V_{BR}	Pin1 to Pin3 or Pin2 to Pin3, $I_R = 1\text{ mA}$	13.3	-	-	V
		Pin3 to Pin1 or Pin3 to Pin2, $I_R = 1\text{ mA}$	7.5	-	-	
Reverse Leakage Current	I_R	Pin1 to Pin3 or Pin2 to Pin3, $V_R = 12\text{ V}$	-	-	1	μA
		Pin3 to Pin1 or Pin3 to Pin2, $V_R = 7\text{ V}$	-	-	1	
Clamping Voltage	V_{CL}	Pin1 to Pin3 or Pin2 to Pin3, $I_{PP} = 1\text{ A}$, $t_P = 8/20\text{ us}$	-	-	19	V
		Pin1 to Pin3 or Pin2 to Pin3, $I_{PP} = 5\text{ A}$, $t_P = 8/20\text{ us}$	-	-	25	
		Pin3 to Pin1 or Pin3 to Pin2, $I_{PP} = 1\text{ A}$, $t_P = 8/20\text{ us}$	-	-	12	
		Pin3 to Pin1 or Pin3 to Pin2, $I_{PP} = 8\text{ A}$, $t_P = 8/20\text{ us}$	-	-	15	
Off State Junction Capacitance	C_J	0Vdc Bias $f = 1\text{ MHz}$	-	29	35	pF

NOTE :

1. 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 operation voltage level.



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TYPICAL CHARACTERISTIC CURVES

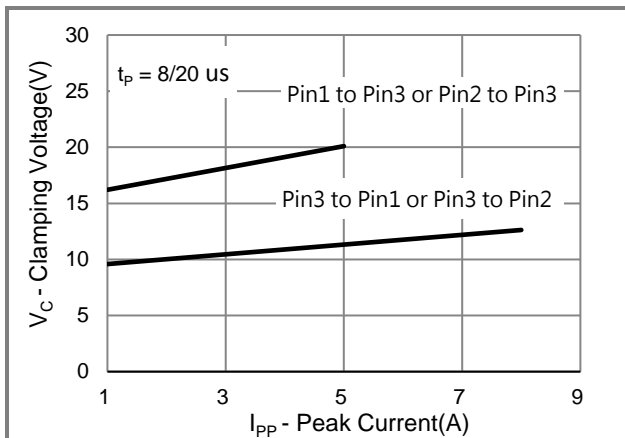


Fig.1 Typical Peak Clamping Voltage

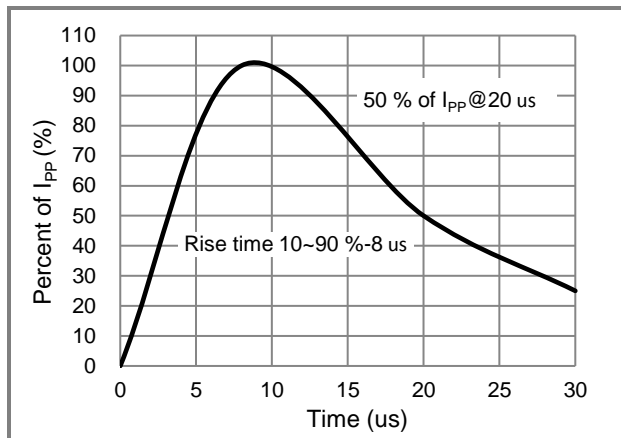


Fig.2 Pulse Waveform

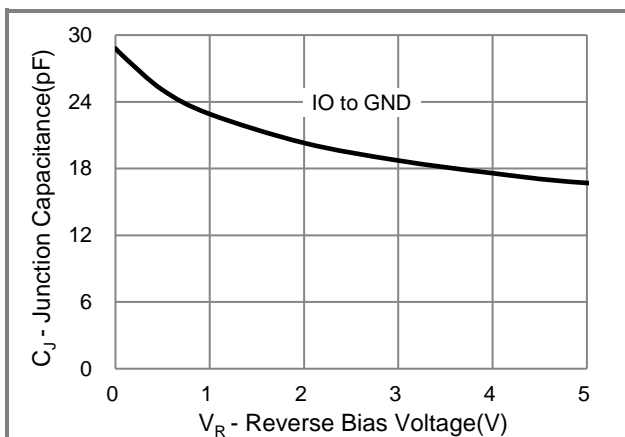


Fig.3 Typical Junction Capacitance

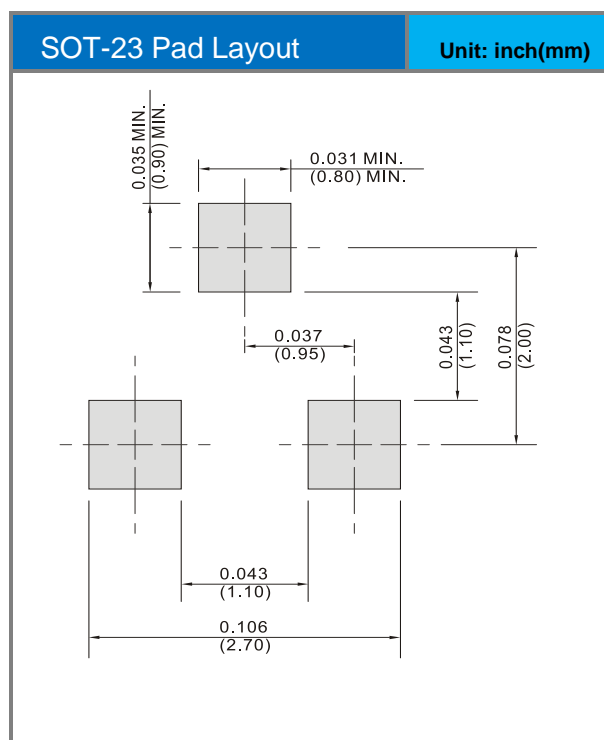
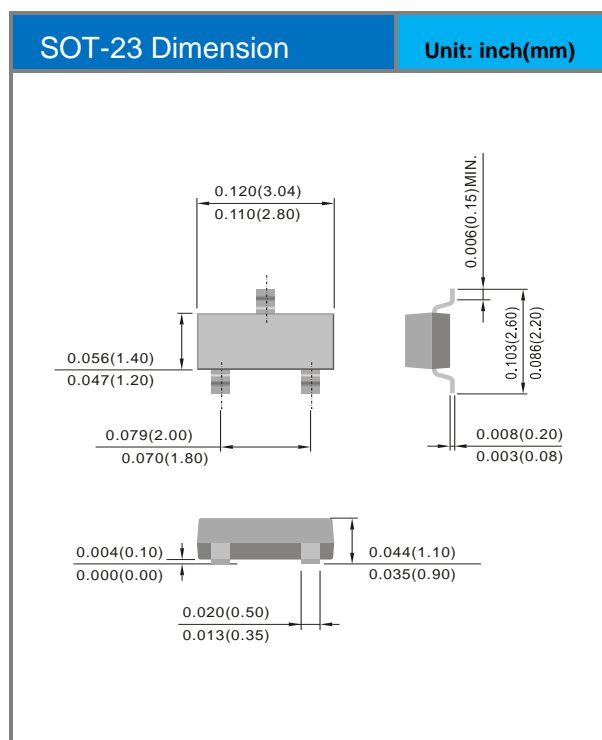


PEC33712C2A-AU

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
PEC33712C2A-AU_R1_000A1	SOT-23	3K / 7" Reel	3TA	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout





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