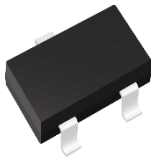
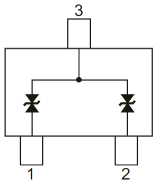
PEC3215C2A-AU

ESD PROTECTION

Voltage **15 V**

SOT-23





Features

- ISO10605(C = 330 pF, R = 330 Ω): ± 30 kV Air, ± 30 kV Contact
- ISO7637-3:
  -Pulse 3a: V_S = -150 V
  -Pulse 3b: V_S = +100 V
- IEC61000-4-5(Lightning): 5 A(8/20 uS)
- Low clamping voltage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Case: Molded plastic, SOT-23
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
Typical Thermal Resistance	$R_{\theta JA}$ (1)	350	°C/W
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

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Electrical Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V_{RWM} (2)	-	-	-	15	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1 mA, Any I/O pins to GND	17	-	20	V
Reverse Leakage Current	I_R	V_R = 15 V	-	-	1	uA
Clamping Voltage	V_{CL}	I_{PP} = 1 A, t_P = 8/20 us, Any I/O pins to GND	-	-	24	V
		I_{PP} = 5 A, t_P = 8/20 us, Any I/O pins to GND	-	-	30	
Off State Junction Capacitance	C_J	0Vdc Bias f = 1MHz, Any I/O pins to GND	-	17	20	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_{RWM}), which should be equal to or greater than the DC or continuous peak operation voltage level

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TYPICAL CHARACTERISTIC CURVES

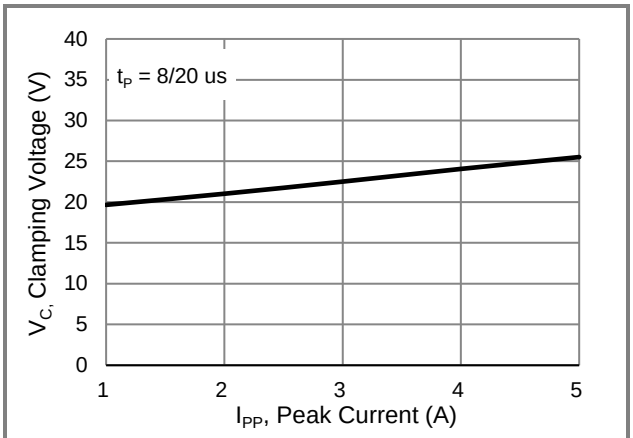

Fig.1 Typical Peak Clamping Voltage

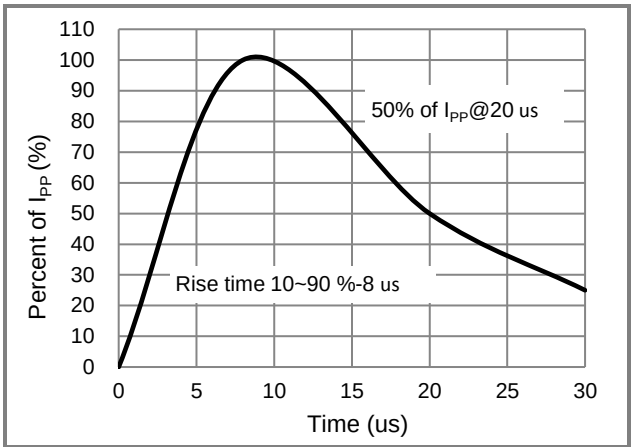

Fig.2 Pulse Waveform

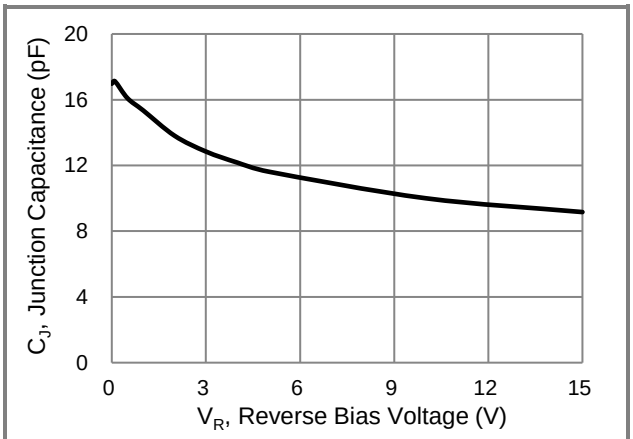

Fig.3 Typical Junction Capacitance

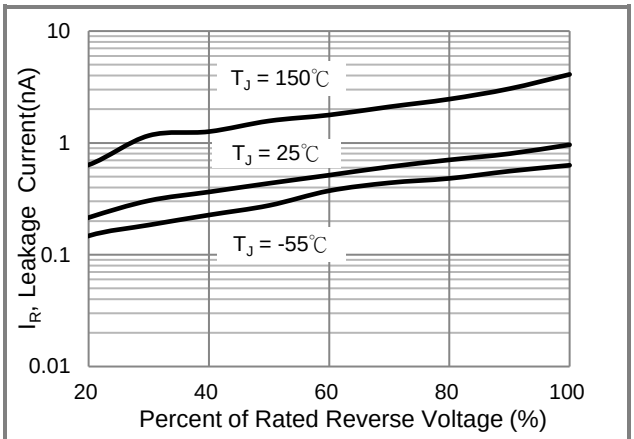

Fig.4 Typical Reverse Characteristics

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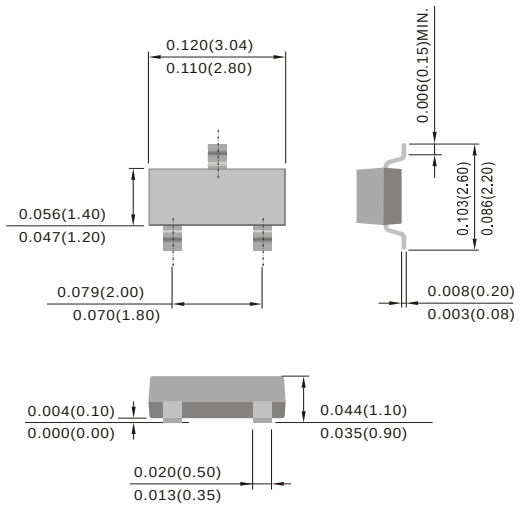
Part No. Packing Code Version

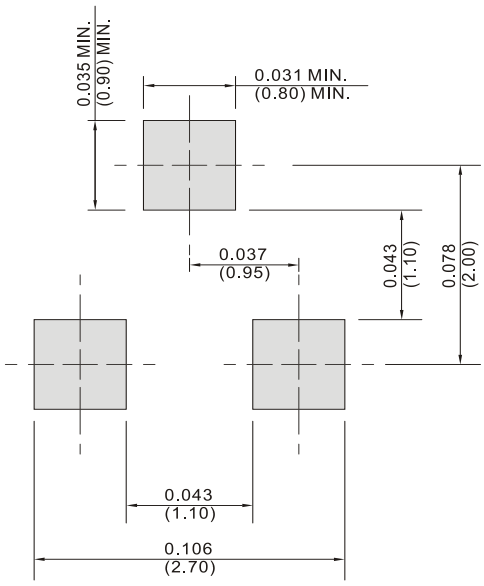
Part No. Packing Code	Package Type	Packing Type	Marking	Version
PEC3215C2A-AU_R1_000A1	SOT-23	3K / 7" Reel	A22	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout

SOT-23 Dimension — Unit: inch(mm)



SOT-23 Pad Layout — Unit: inch(mm)



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