

PEC4205CS-AU

ESD Protection

Voltage

5 V

Features

- ISO10605(C=330pF, R=330Ω) : ±30kV Air, ±30kV Contact
- HBM $\geq \pm 8\text{KV}$ & CDM $\geq \pm 2\text{KV}$
- IEC61000-4-5(Lightning) : 30A(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 : SOD-323 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0041 grams

SOD-323



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

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V _{ESD}	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Typical Thermal Resistance ^(Note 1)	R _{θJA}	650	°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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage ^(Note 2)	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 1\text{ mA}$	6	-	9	V
Reverse Leakage Current	I_R	$V_R = 5\text{ V}$	-	-	500	nA
Clamping Voltage	V_{CL}	$I_{PP} = 1\text{ A}$, $t_P = 8/20\text{ us}$	-	6.7	10	V
		$I_{PP} = 10\text{ A}$, $t_P = 8/20\text{ us}$	-	8.3	14.5	V
		$I_{PP} = 30\text{ A}$, $t_P = 8/20\text{ us}$	-	11	18	V
Off State Junction Capacitance	C_J	0Vdc Bias $f = 1\text{ MHz}$	-	-	200	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.
3. Not applicable to parts with V_{RWM} lower than battery voltage.

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TYPICAL CHARACTERISTIC CURVES

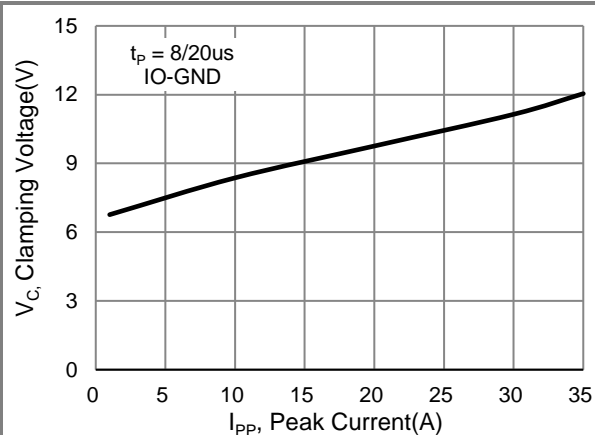


Fig.1 Typical Peak Clamping Voltage

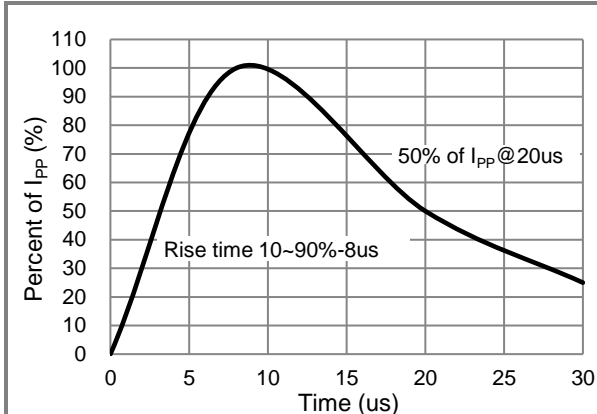


Fig.2 Pulse Waveform

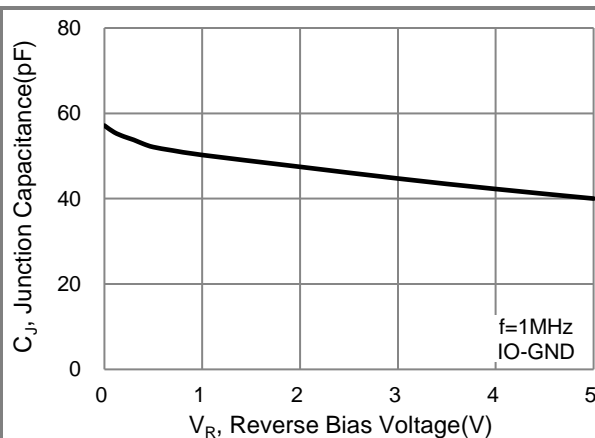


Fig.3 Typical Junction Capacitance

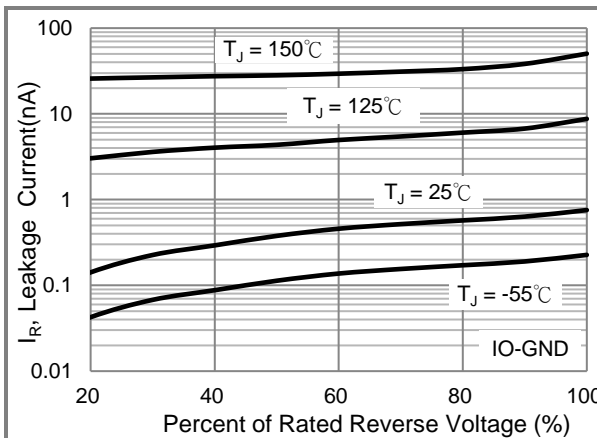


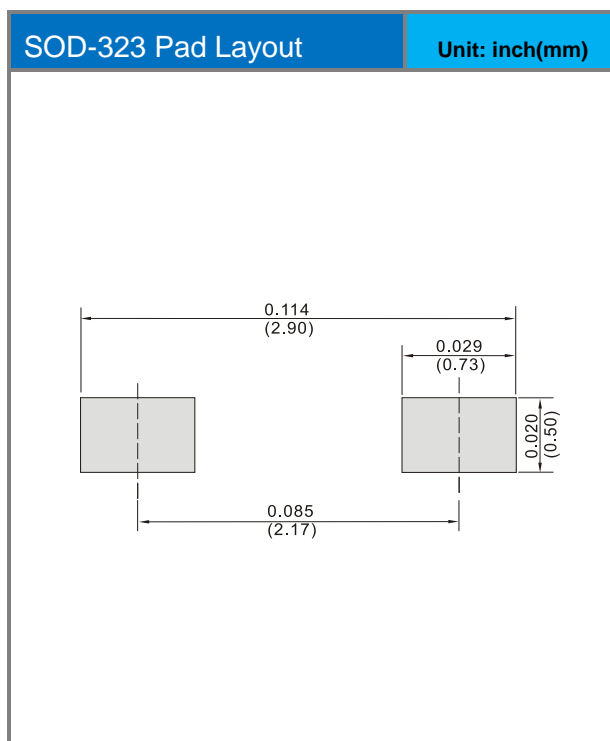
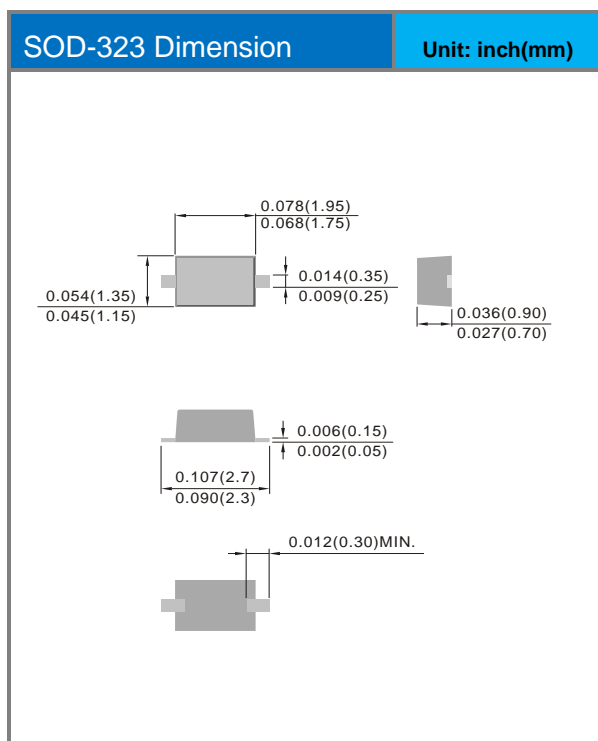
Fig.4 Typical Reverse Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PEC4205CS-AU	SOD-323	5K pcs / 7" reel	AAF

Packaging Information & Mounting Pad Layout



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