



PE9180C1A-AU

Low Capacitance Diode Array

Voltage 80 V

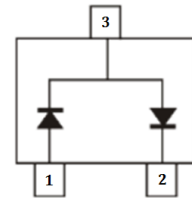
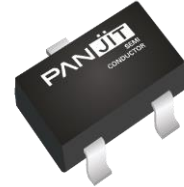
Features

- ISO10605(C=330pF, R=330Ω) :±30kV Air, ±30kV Contact
- HBM ≥ ±8KV & CDM ≥ ±2KV
- IEC61000-4-5(Lightning) : 11A(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_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air) ^(Note 3)	V _{ESD}	±30	kV
ESD IEC61000-4-2(Contact) ^(Note 3)		±30	
Typical Thermal Resistance ^(Note 1)	R _{θJA}	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 ^(Note 2)	V _{RWM}	-	-	-	80	V
Reverse Breakdown Voltage	V _{BR}	I _R = 100uA	100	-	-	V
Forward Voltage	V _F	I _F = 1mA	-	-	715	mV
		I _F = 10mA	-	-	855	mV
		I _F = 50mA	-	-	1	V
		I _F = 150mA	-	-	1.25	V
Reverse Leakage Current	I _R	V _R = 25V	-	-	30	nA
		V _R = 80V	-	-	100	nA
Clamping Voltage ^(Note 3)	V _{CL}	I _{PP} = 1A, t _P = 8/20us	-	-	3	V
		I _{PP} = 11A, t _P = 8/20us	-	-	20	V
Off State Junction Capacitance	C _J	0Vdc Bias f = 1MHz	-	0.6	2	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. Measured from pin 3 to pins 1 and 2 (pins 1 and 2 are connected).



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TYPICAL CHARACTERISTIC CURVES

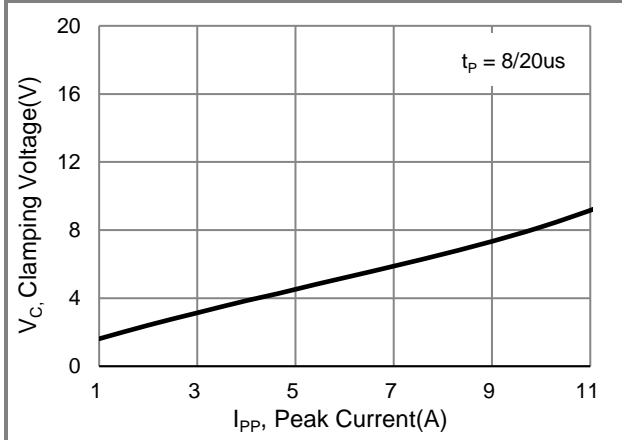


Fig.1 Typical Peak Clamping Voltage

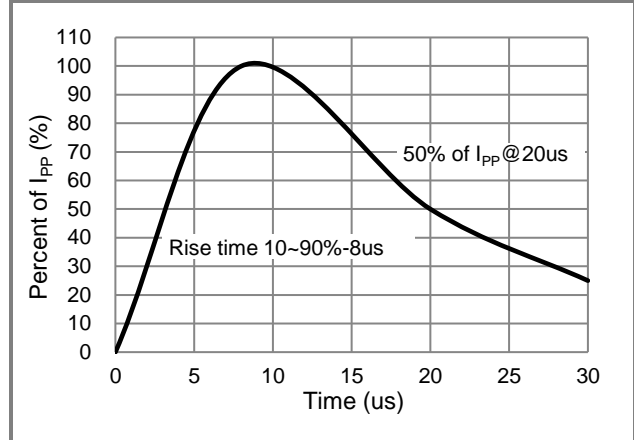


Fig.2 Pulse Waveform

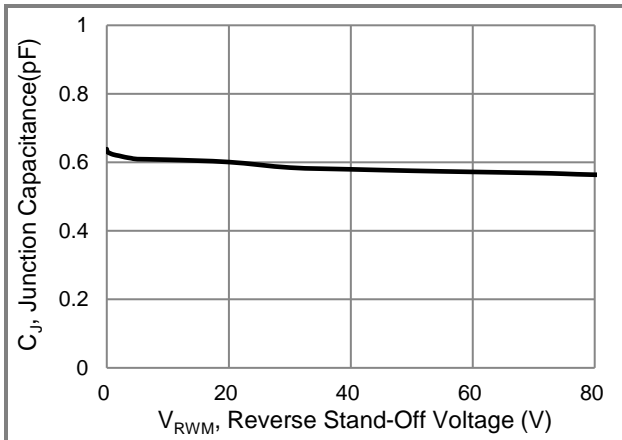


Fig.3 Typical Junction Capacitance

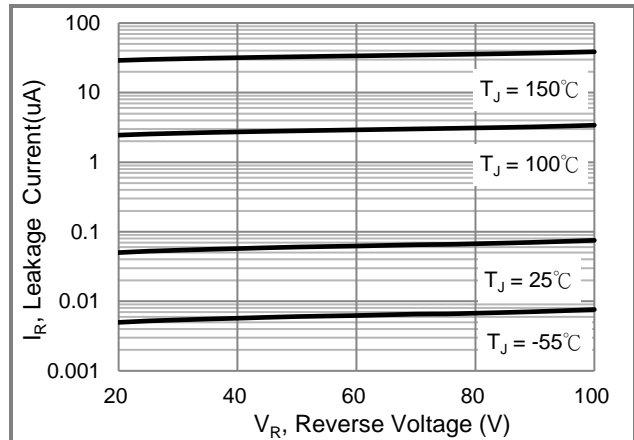


Fig.4 Typical Reverse Characteristics

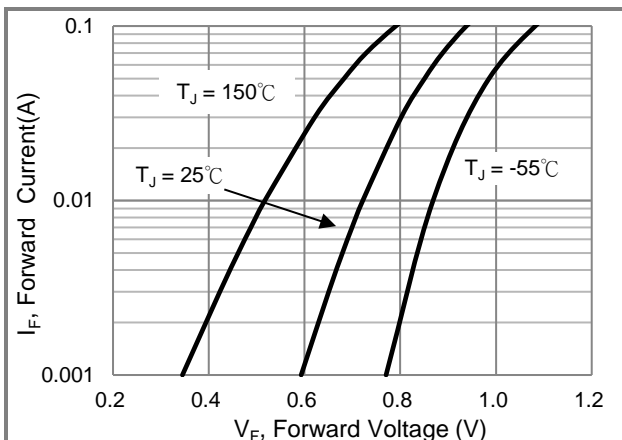


Fig.5 Typical Forward Characteristics

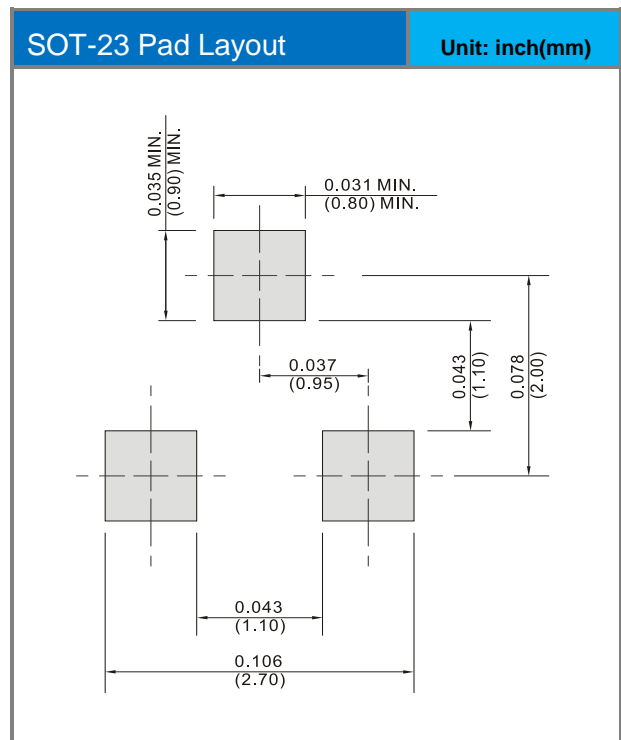
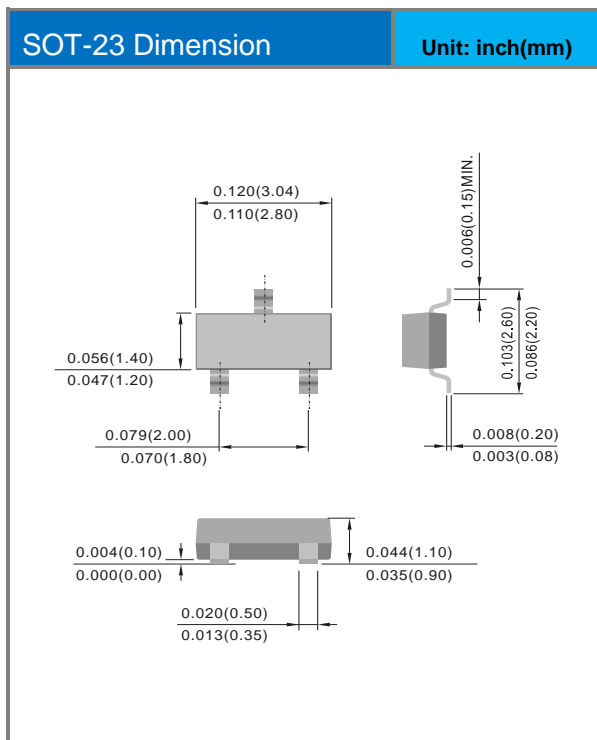


PE9180C1A-AU

Part No. Packing Code Version

Part No.	Package Type	Packing Type	Marking	Version
PE9180C1A-AU	SOT-23	3K pcs / 7" reel	ABK	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout





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