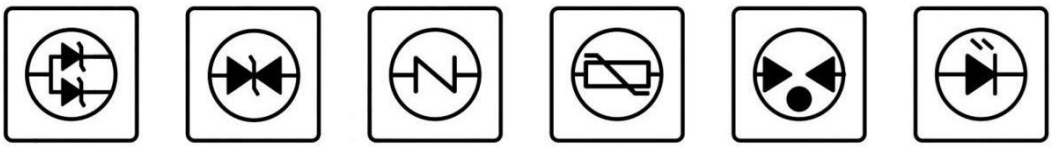
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PNE20020AERX-MS

Product specification

PNE20020AERX-MS

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 200V
Forward Current - 2.0 A

FEATURE

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15mg 0.00048oz

Reference News

SOD-123FL	Pin Configuration	MARKING
		MT MS

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	PNE20020AERX-MS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current ,8 .3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Max Instantaneous Forward Voltage at 2 A	V_F	0.95	V
Maximum DC Reverse Current at Rated DC Reverse Voltage T_a = 25℃ / T_a = 100℃	I_R	0.3 3	mA
Typical Junction Capacitance (1)	C_j	80	pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	85	℃/W
Operating Junction Temperature Range	T_j	-55 ~ +125	℃
Storage Temperature Range	T_{stg}	-55 ~ +150	℃

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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ELECTRICAL CHARACTERISTICS CURVE

Fig.1 Forward Current Derating Curve

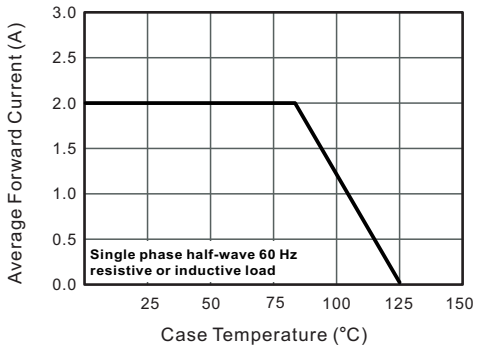


Fig.2 Typical Reverse Characteristics

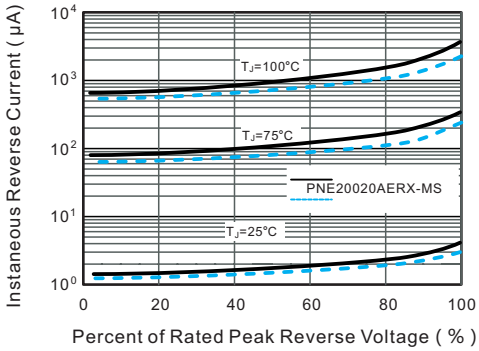


Fig.3 Typical Forward Characteristic

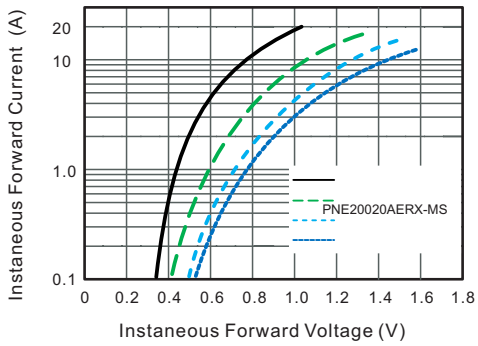


Fig.4 Typical Junction Capacitance

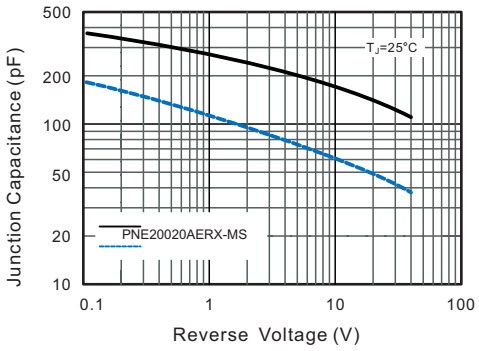


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

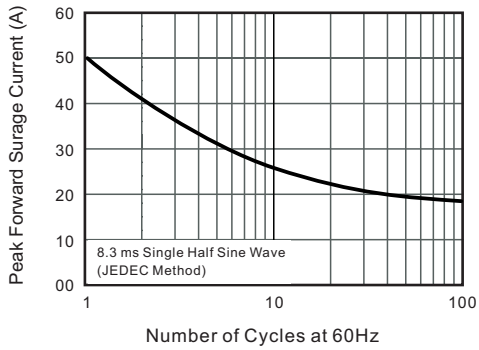
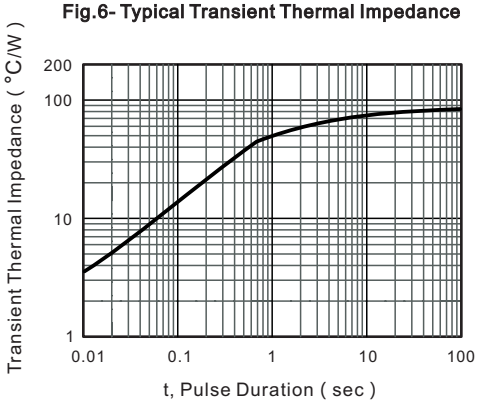
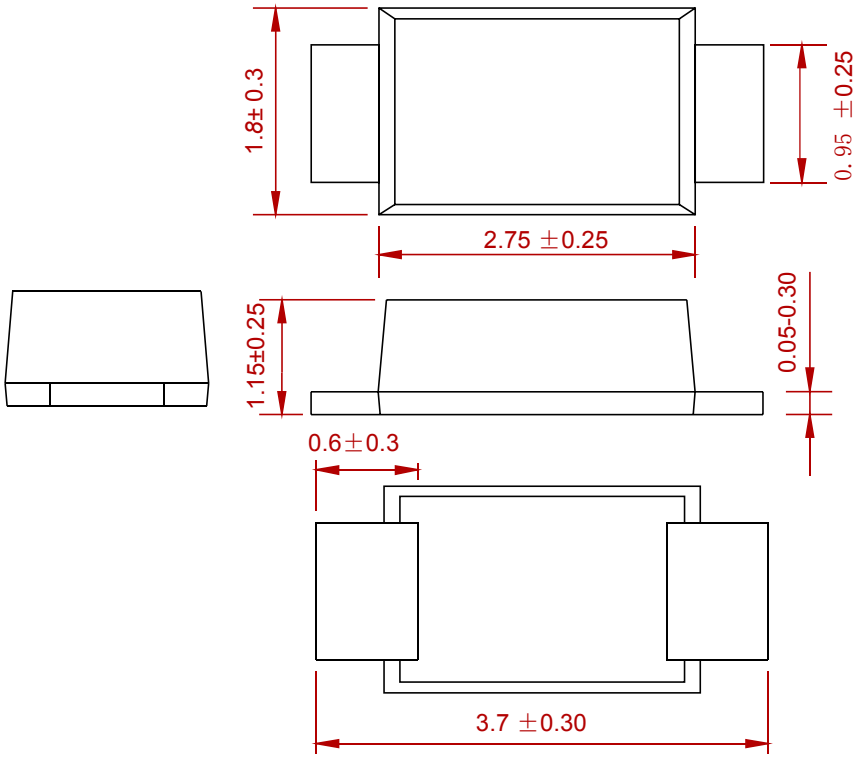


Fig.6- Typical Transient Thermal Impedance



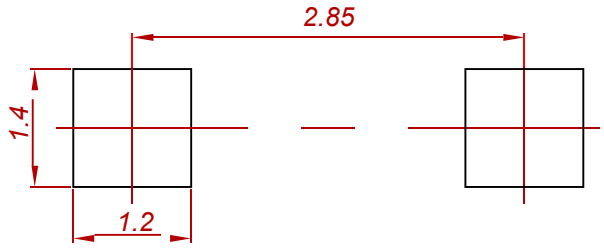
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PACKAGEMECHANICALDATA



Dimensions in millimeters

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
PNE20020AERX-MS	SOD-123FL	3000

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