

DATA SHEET

PS100RS~PS1010RS

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE	50 to 1000 Volts	CURRENT	1.0 Amperes
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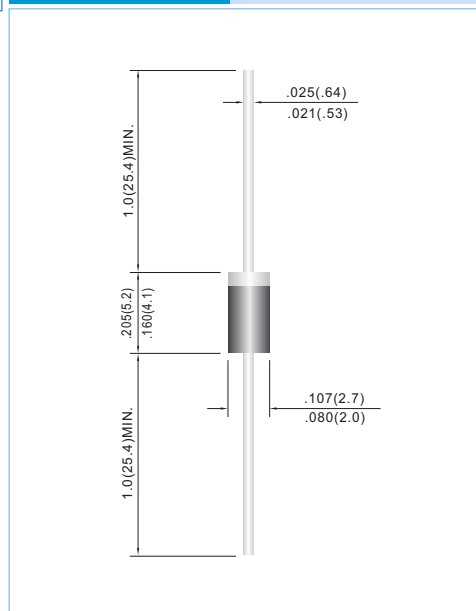
A-405	Unit: inch(mm)
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FEATURES

- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low leakage.
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, A-405
Terminals: Axial leads, solderable to MIL-STD-202, Method 208
Polarity: Color Band denotes cathode end
Mounting Position: Any
Weight: 0.008 ounce, 0.22 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	PS100RS	PS101RS	PS102RS	PS104RS	PS106RS	PS108RS	PS1010RS	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I _{AV}	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A	V _F	1.3							V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	5.0 500							uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	150				250	500		ns
Typical Junction capacitance (Note 2)	C _J	12							pF
Typical Thermal Resistance (Note 3)	RθJA	41							°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 TO +150							°C

NOTES: 1. Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{rr}=.25A$
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length with both leads equally heatsink.

RATING AND CHARACTERISTIC CURVES

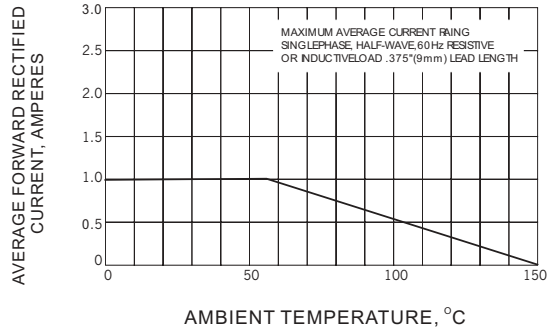


Fig.1 FORWARD CURRENT DERATING CURVE

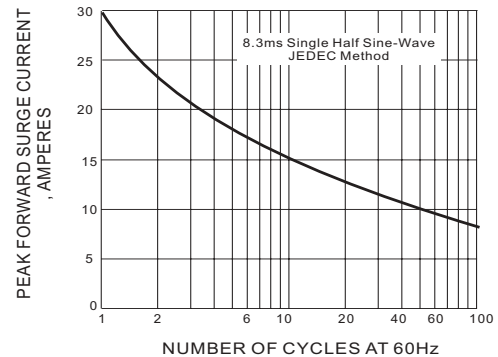


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

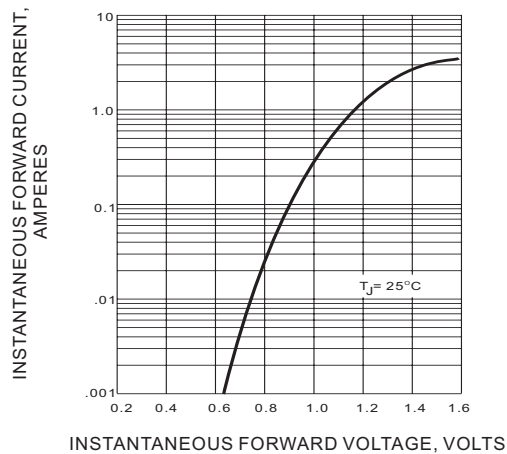


Fig.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

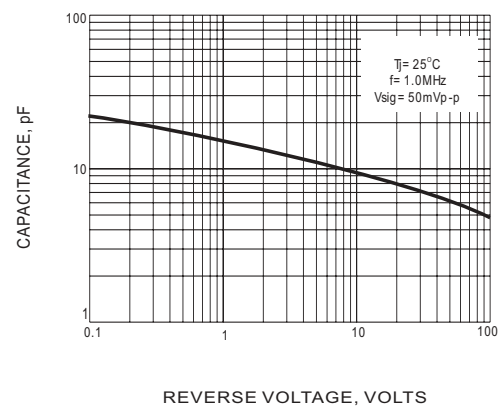


Fig.4 TYPICAL JUNCTION CAPACITANCE