



SCHOTTKY BARRIER RECTIFIER

SR302 THRU SR310

VOLTAGE RANGE

20 to 100 Volts

CURRENT

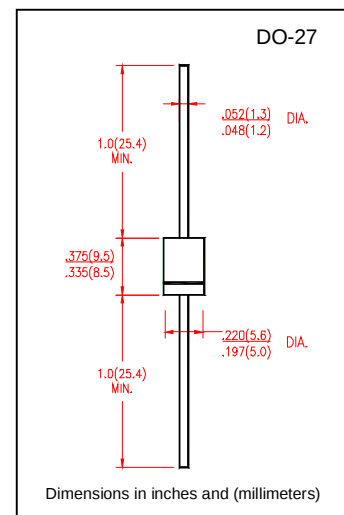
3.0 Ampere

FEATURES

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High surge capability
- High temperature soldering guaranteed
250°C/10 seconds, 0.373" (9.5mm) lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: solderable per MIL-STD-202E method 208C
- Polarity: Color band denoted cathode end
- Mounting position: Any
- Weight: 0.042 ounce, 1.19 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		SYMBOLS	SR302	SR303	SR304	SR305	SR306	SR308	SR310	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current 0.375 " (9.5mm) lead length ,(Note 1) T _L =100℃		I _(AV)	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	80							Amps
Maximum Instantaneous Forward Voltage @ 3.0A		V _F	0.55		0.75		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element (Note 1)	T _A = 25℃	I _R	0.5							mA
	T _A = 125℃		30							
Typical Junction Capacitance(measured at 1.0Hzand applied reverse voltage of 4.0V)		C _J	250							pF
Typical Thermal Resistance (NOTE 2)		R _{0JA}	15							℃/W
Operating Junction Temperature Range		T _J	(-55 to +150)							℃
Storage Temperature Range		T _{STG}	(-55 to +150)							℃

Notes:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. Thermal resistance from junction to ambient P.C.B. mounted with 0.375" (9.5mm) lead length with 2.5" $\times$ 2.5" (63.5 $\times$ 63.5cm) copper pads



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RATING AND CHARACTERISTIC CURVES SR302 THRU SR310

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

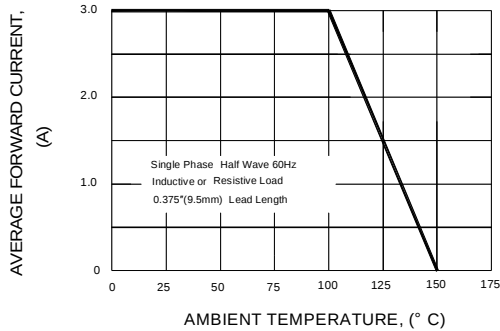


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

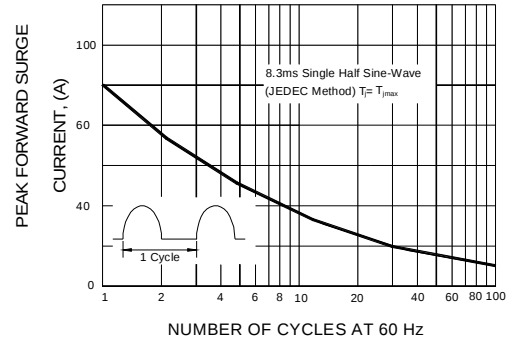


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

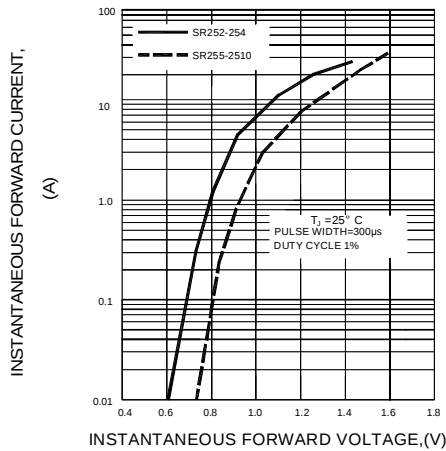


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

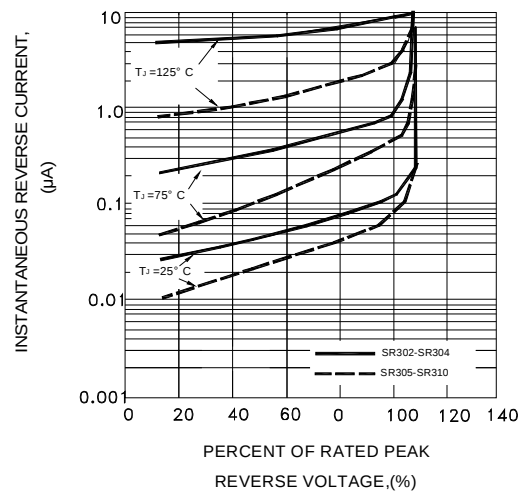


FIG.5-TYPICAL JUNCTION CAPACITANCE

