

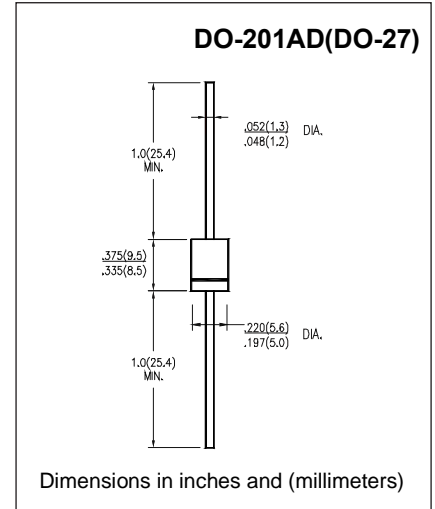
## SCHOTTKY BARRIER RECTIFIER

### FEATURES

- High Performance and Reliability best suited for Automotive application
- Fast switching speed
- Low forward voltage
- Low power 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: 0.045 ounce, 1.27 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%.

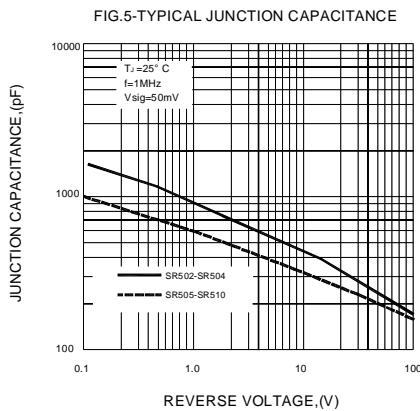
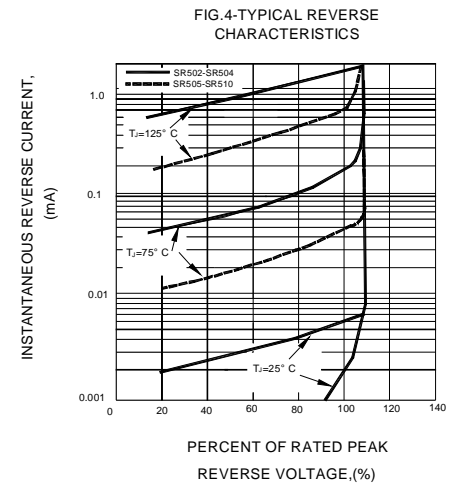
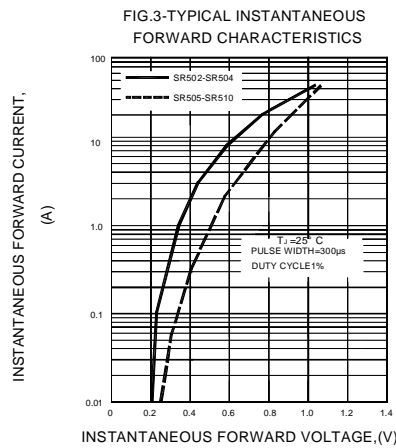
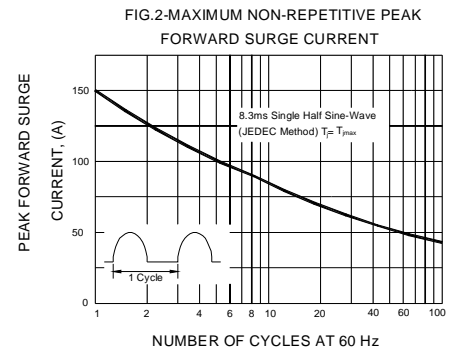
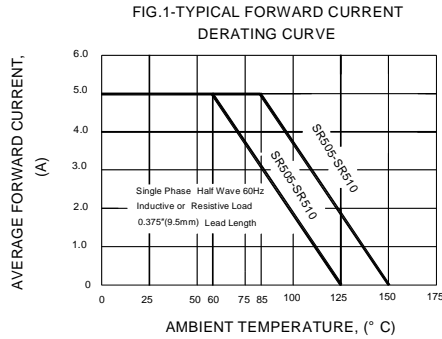
	SYMBOLS	SR502	SR503	SR504	SR505	SR506	SR508	SR510	SR5150	SR5200	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current, 0.375”(9.5mm) Lead length, (Note 1) See Fig.1	$T_L = 60^\circ\text{C}$ (SR502-504)	5.0									Amps
	$T_L = 85^\circ\text{C}$ (SR505-5200)										
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150									Amps
Maximum Instantaneous Forward Voltage @ 5.0A	$V_F$	0.55			0.75		0.85	0.90	0.95		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element (Note 1)	$T_A = 25^\circ\text{C}$	1.0									mA
	$T_A = 100^\circ\text{C}$	50									
Typical Junction Capacitance (Measured at 1.0Hz and applied reverse voltage of 4.0V)	$C_J$	550			450		350			pF	
Typical Thermal Resistance	$R_{\theta JA}$	15									$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	(-55 to +150)									$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)									$^\circ\text{C}$

#### Notes:

1. Pulse test: 300  $\mu$ s pulse width, 1% duty cycle

## SCHOTTKY BARRIER RECTIFIER

### RATING AND CHARACTERISTIC CURVES SR502 - SR5200



#### Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.