



Schottky Barrier Rectifiers

Reverse Voltage 20 to 100 Volts Forward Current 2.0 Amperes

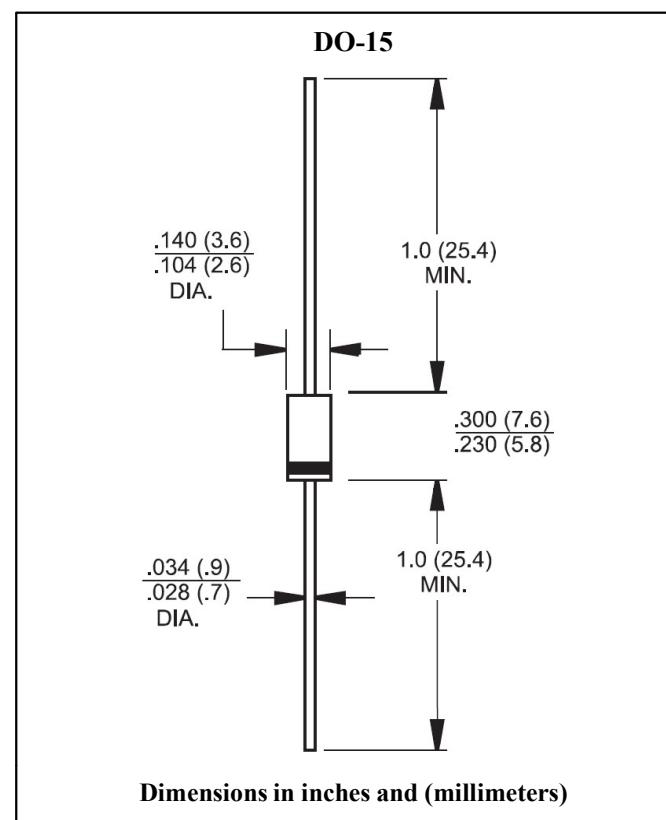
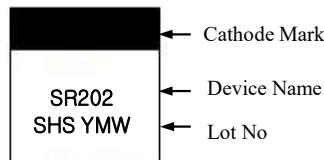
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL 94V-O rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds /0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 0.4 gram

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Single phase half wave 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

Parameter	Symbol	SR 202	SR 203	SR 204	SR 205	SR 206	SR 209	SR 2A0	Unit	Remark		
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	V			
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V			
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	V			
Maximum Average Forward Rectified Current See Fig. 1	I _{F(AV)}	2.0						A				
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50						A				
Maximum Instantaneous Forward Voltage @ 2.0A	V _F	0.55		0.70		0.85		V				
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5				1.0		mA	Ta=25°C			
		20				20		mA	Ta=100°C			
Typical Thermal Resistance	R _{th(j-a)}	45				35		°C /W	Note 1			
Typical Junction Capacitance	C _J	200		160				pF	Note 2			
Operation Junction Temperature Range	T _J	-55 to +125			-55 to +150			°C				
Storage Temperature Range	T _{STG}	-55 to +150						°C				

Note 1. Mount on Cu-Pad Size 10mm×10mm on P.C.B

Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.



Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

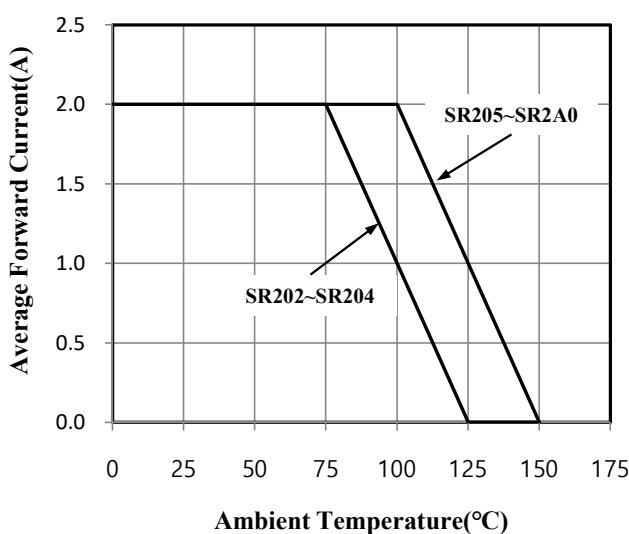


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

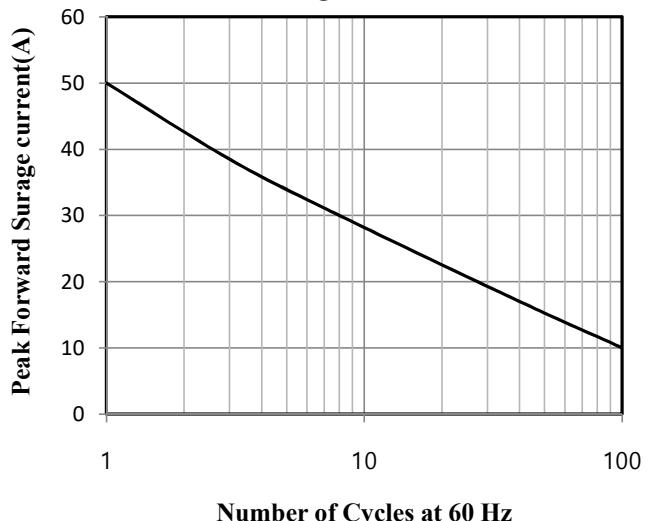


Fig.3 Typical Instantaneous Forward Characteristics

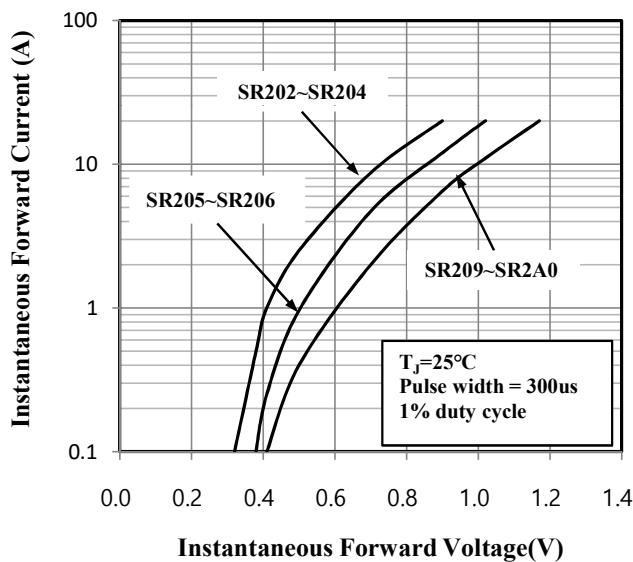


Fig.4 Typical Junction Capacitance

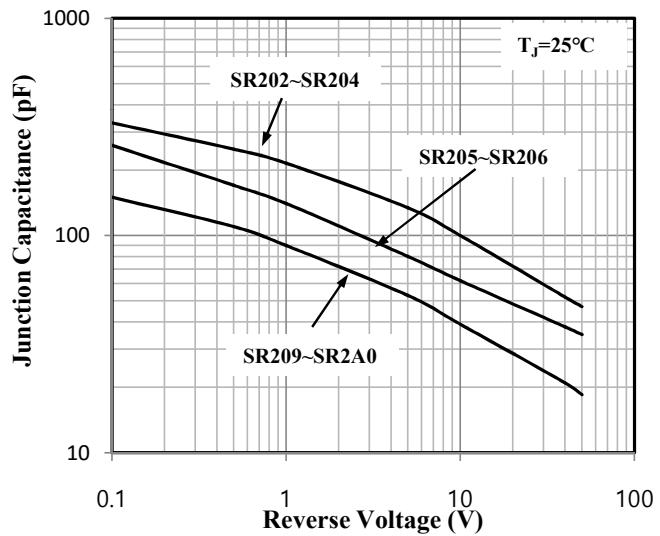


Fig.5 Typical Reverse Characteristics

