



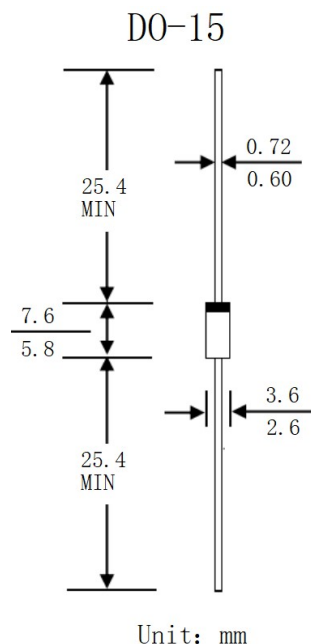
**Schottky Barrier Rectifier**  
**Reverse Voltage 20 to 200V**  
**Forward Current 2.0A**

## Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375"(9.5mm) lead length  
5lbs. (2.3kg) tension

## Mechanical data

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: any



## 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 current derate by 20%

Parameter	Sym bols	SR 220	SR 230	SR 240	SR 250	SR 260	SR 270	SR 280	SR 290	SR 2100	SR 2150	SR 2200	Uni t
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	150	200	V
Maximum average forward current .375"(9.5mm) Lead length (see fig.1)	I <sub>F(AV)</sub>	2.0											A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	60.0											A
Maximum instantaneous forward Voltage at 2.0A	V <sub>F</sub>	0.45	0.55		0.70		0.85					0.95	V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	I <sub>R</sub>	0.5								0.2		mA	
		10.0				5.0			2.0				
Typical Junction capacitance (Note 1)	C <sub>J</sub>	220			80								pF
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	50.0											°C /W
Operating junction temperature range	T <sub>J</sub>	-65 to +125						-65 to +150					°C
Storage temperature range	T <sub>STG</sub>	-65 to +150											°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted

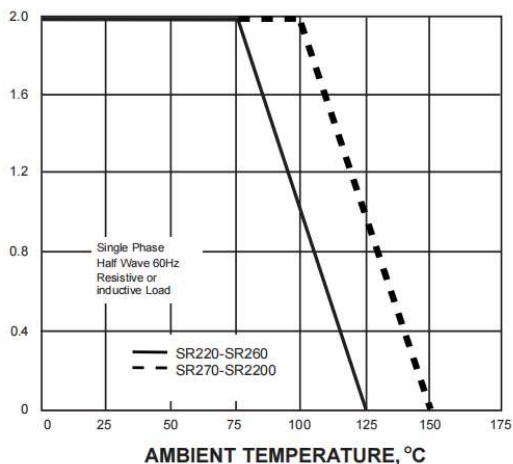


## Ratings and Characteristic Curves

(TA=25°C unless otherwise noted)

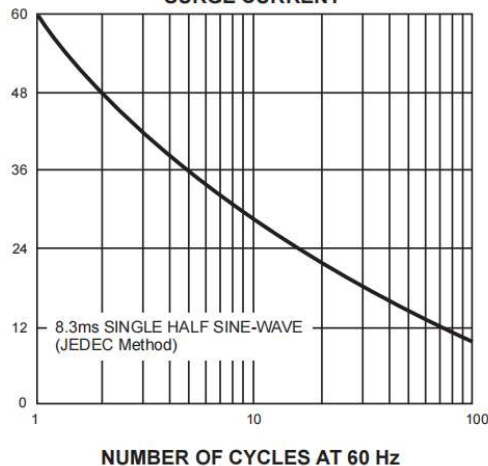
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



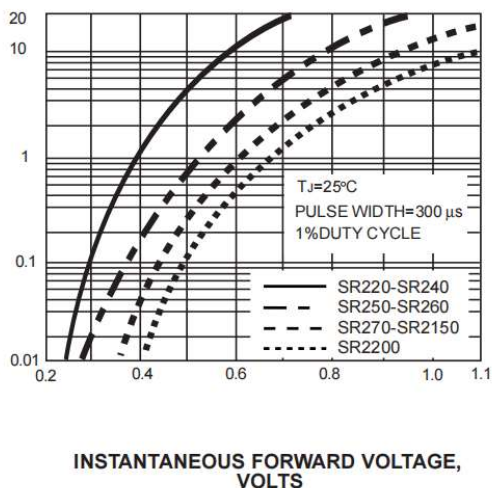
PEAK FORWARD SURGE CURRENT,  
AMPERES

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



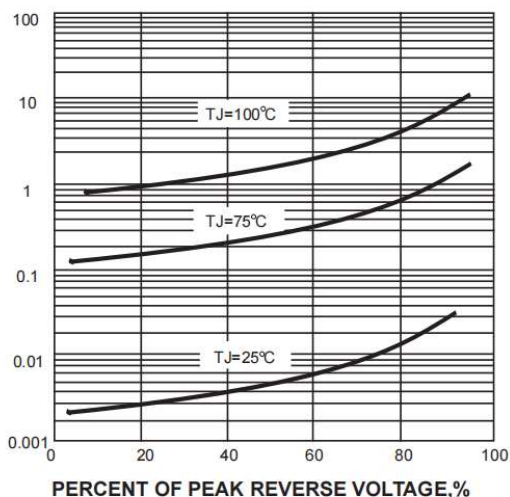
INSTANTANEOUS FORWARD  
CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



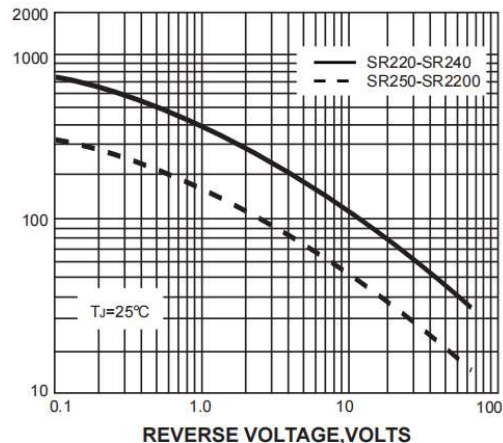
INSTANTANEOUS REVERSE CURRENT,  
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

