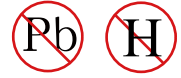




Schottky Barrier Rectifier

Voltage Range - 20 to 200 Volts Current - 10 Amperes



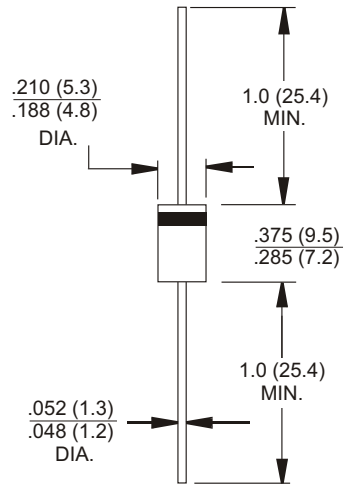
Features

- Metal silicon rectifier,majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High surge capability
- High current capability,low VF
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-201AD
- Polarity: Color band dentes cathode end
- Mounting Position: Any

DO-201AD Unit:inch(mm)



Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless or otherwise specified.)
 (Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

Parameters	Symbol	SR 1020	SR 1030	SR 1040	SR 1045	SR 1050	SR 1060	SR 1080	SR 10100	SR 10150	SR 10200	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V
Maximum Average Froward Rectified Current (Note 1)	$I_{(AV)}$	10										A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150										A
Forward Voltage per Diode at 10A	V_F	0.55			0.7			0.85		0.92		V
Maximum DC Reverse Current $T_a=25^{\circ}C$ at Rated DC Blocking Voltage $T_a=100^{\circ}C$	I_R	0.3						0.05				mA
Typical Junction Capacitance (Note 2)	C_J	350						280				pF
Maximum Thermal Resistance (Note 1)	$R_{\theta JA}$	50										$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150										$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150										$^{\circ}C$

- Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
 2. Measure at 1.0MHz and applied reverse voltage of 4.0 Vdc.

DEVICE CHARACTERISTICS

SR1020 THRU SR10200

FIG.1-FORWARD CURRENT DERATING CURVE

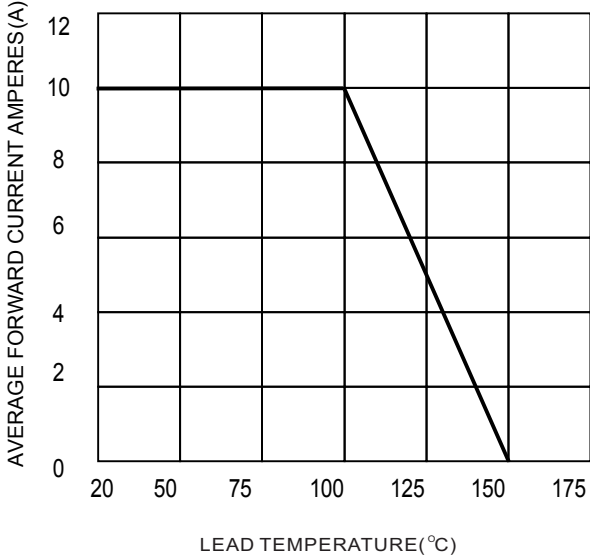


FIG.2-TYPICAL FORWARD CHARACTERISTICS

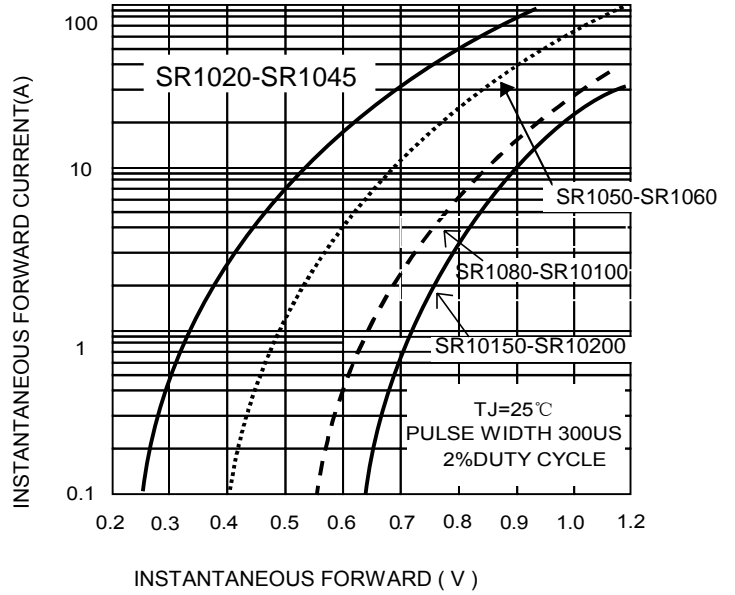


FIG.3-MAXIMUM NON-REPETITIVE SURGE

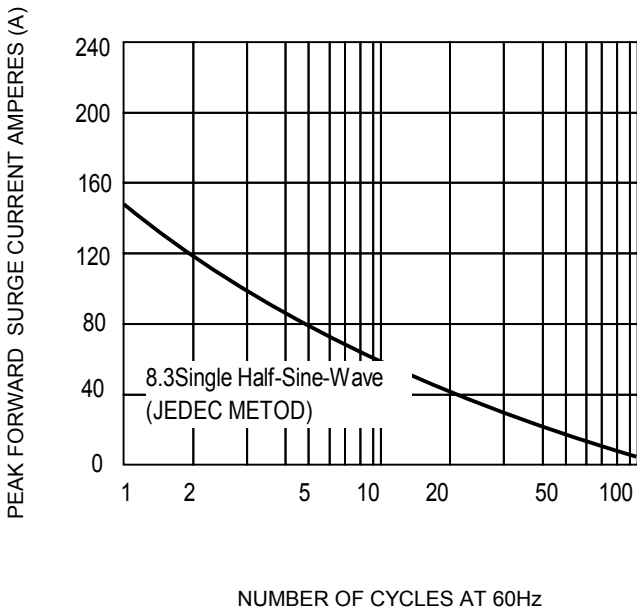


FIG.4-TYPICAL REVERSE CHARACTERISTICS

