

SCHOTTKR BARRIER RECTIFIER

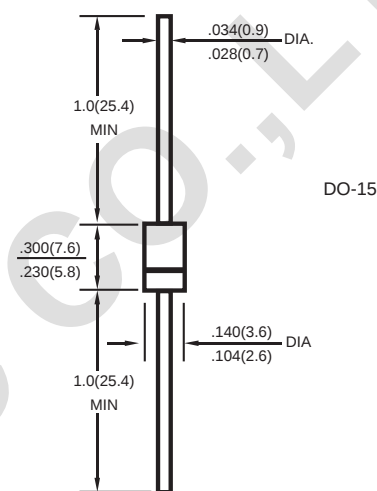
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals, 0.375" (9.5mm) lead length, 5 lbs. (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
- **Weight:** 0.014 ounce, 0.39gram

Reverse Voltage-20 to 100 Volts
Forward Current -2.0 Amperes



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load. For capacitive load derate by 20%.

		SYMBOLS	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2A0	UNITS
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	57	71	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Overage Forward Rectified Current0.375” (9.5mm) lead length at T _L =75°C		I _(AV)	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	50.0							Amps
Maximum Instantaneous Forward Voltage at 2.0A		V _F	0.55			0.70		0.85		Volts
Maximum instantaneous Reverse Current at rated DC blocking voltage (NOTE1)	T _A =25°C	I _R	1.0							mA
	T _A =100°C		10							
Typical Junction Capacitance(NOTE3)		C _J	170							pF
Typical Thermal Resistance(NOTE2)		R _{θJA}	35.0							°C/W
Operating Temperature Range		T _J	-65 to +125							°C
Storage Temperature Range		T _{STG}	-65 to +150							°C

NOTES:

1. Pulse test: 300µs pulse width, 1% duty cycle.
2. Thermal Resistance from Junction to Ambient P.C.B. Mounted with 0.375" (9.5mm) lead length with 1.5X1.5" (38X38mm) copper pads.
3. Measured at 1.0 MHz and reverse voltage of 4.0volts.

FIG.1- FORWARD CURRENT
DERATING CURVE

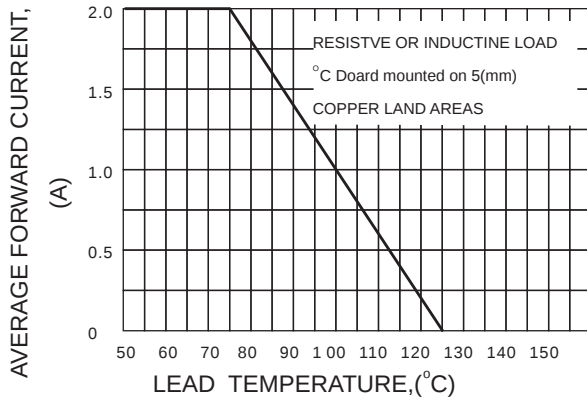


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

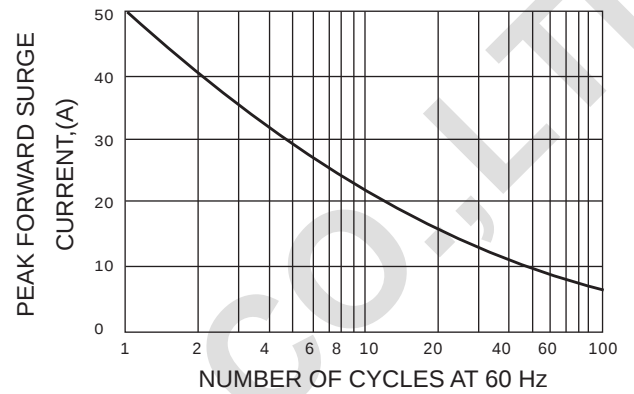
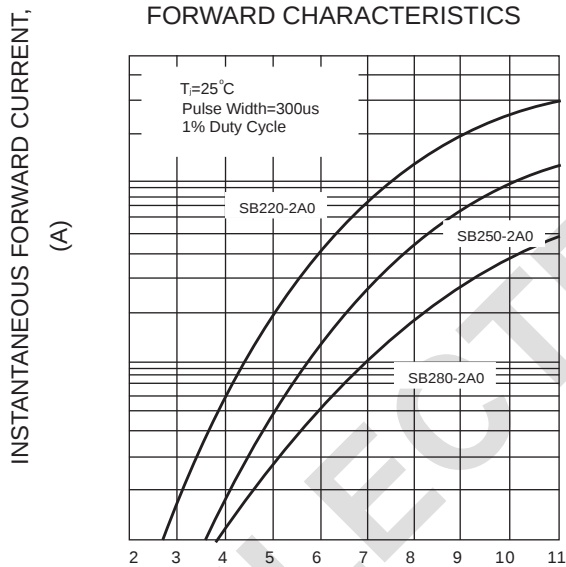


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE,(V)

FIG.4-TYPICAL REVERSE
CHARACTERISTICS

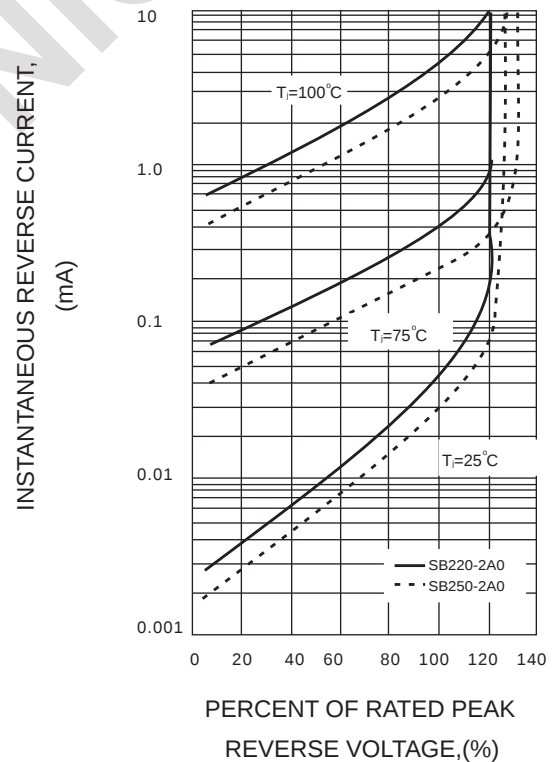


FIG.5-TYPICAL JUNCTION CAPACITANCE

