

# SR120 --- SR1200

## SCHOTTKY BARRIER RECTIFIER

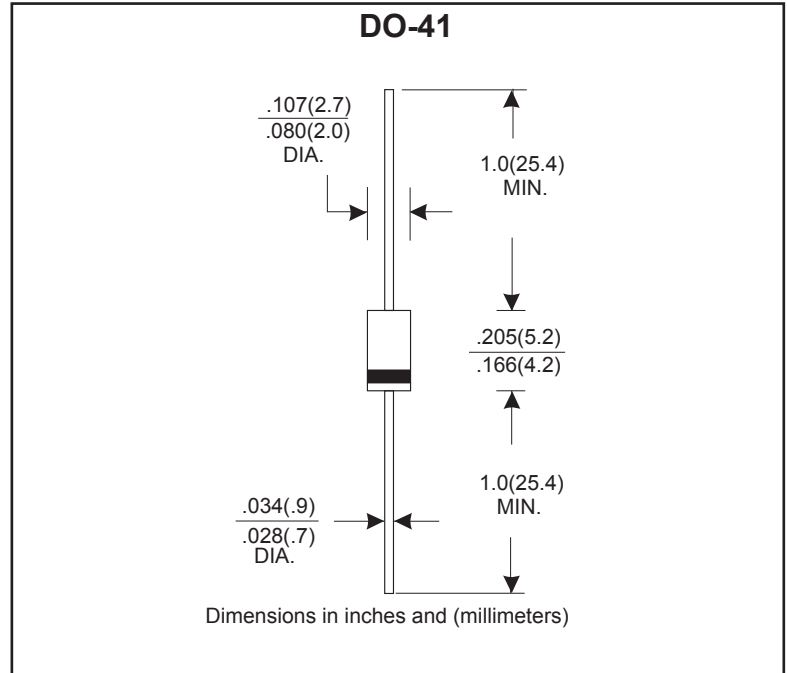
VOLTAGE RANGE: 20--- 200 V    CURRENT: 1.0 A

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- 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:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

### MECHANICAL DATA

- Case:DO-41 molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

TYPE NUMBER	SYMBOL	SR	SR	SR	SR	SR	SR	SR	SR	SR	UNITS
		120	130	140	150	160	180	1100	1150	1200	
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	42	56	63	71	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward rectified Current0.375"(9.5mm) lead length	$I_{F(AV)}$	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	40.0									A
Maximum instantaneous forward voltage at 1.0 A(Note1)	$V_F$	0.55			0.70			0.85			V
Maximum reverse current at rated DC blocking voltage per diode	$I_R$	@ $T_A=25^\circ C$	0.2					0.1			mA
		@ $T_A=125^\circ C$	20					5.0			
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0									°C/W
Typical junction capacitance(Note 3)	$C_j$	110									pF
Storage Temperature	$T_{STG}$	- 55 ---- + 150									°C
Operation Junction Temperature	$T_j$	- 55 ---- + 120									°C

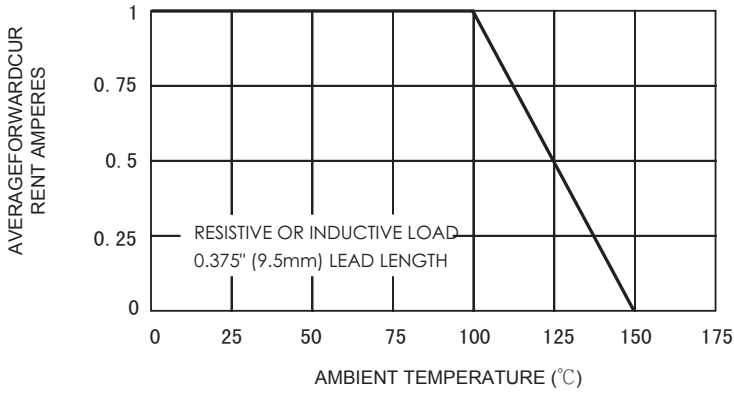
NOTE: 1. Pulse test:300µs pulse width,1% duty cycle.

2. Thermal resistance from junction to case.

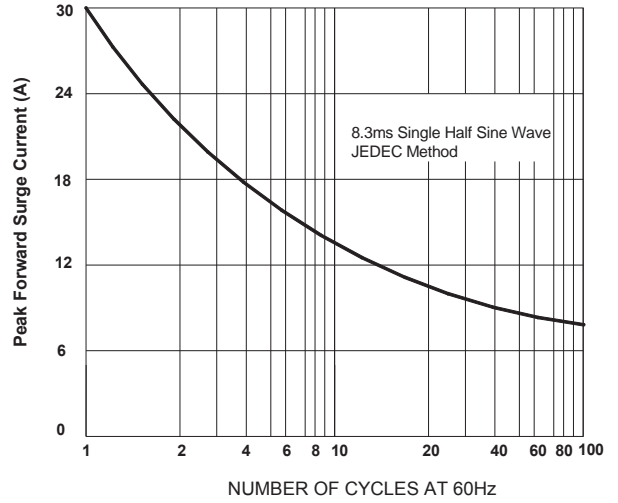


# RATINGS AND CHARACTERISTIC CURVES

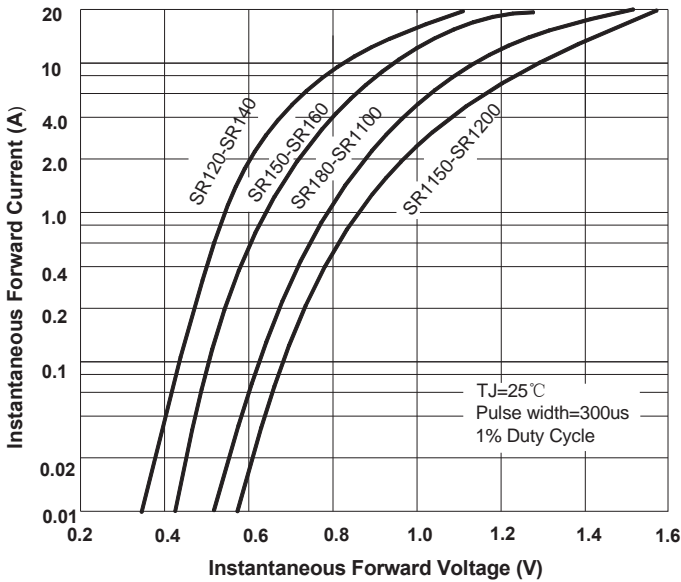
**FIG.1-FORWARD CURRENT DERATING CURVE**



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



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

