



YEA SHIN TECHNOLOGY CO., LTD

SR34L THRU SR320L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



VOLTAGE - 40 to 200 Volts CURRENT - 3.0 Amperes

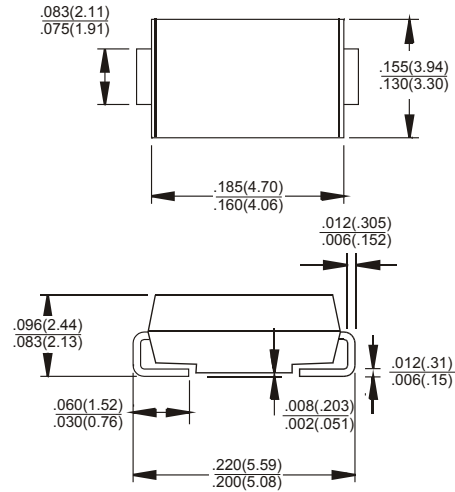
**FEATURE**

- High current capacity, low  $V_F$
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0

**MECHANICAL DATA**

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number

SMB/DO-214AA Unit: inch(mm)



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.  
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	SR34L	SR345L	SR35L	SR36L	SR38L	SR310L	SR315L	SR320L	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	32	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	45	50	60	80	100	150	200	V
Average Rectified Output Current @ $T_L=90^\circ C$	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Raged Load (JEDEC method)	$I_{FSM}$	80								A
Forward Voltage $I_F=3.0A$ (Note 1)	$V_F$	0.45		0.50		0.75		0.85		V
Maximum DC Reverse Current at $T_A=25^\circ C$	$I_R$	0.2				0.05				mA
at Raged DC Blocking Voltage $T_A=100^\circ C$		10				5				
$I^2t$ Raging for Fusing ( $t<8.3ms$ )	$I^2t$	26.56								$A^2S$
Typical Junction Capacitance (Note2)	$C_J$	250								pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	75								$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150								$^\circ C$

Note: 1. Pulse Test with  $PW=300\mu s$ , 1% Duty Cycle.  
2. Measured at 1.0MHz and Applied reverse Voltage of 4.0 Vdc.  
3. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

# DEVICE CHARACTERISTICS

## SR34L THRU SR320L

Fig. 1 Forward Current Derating Curve

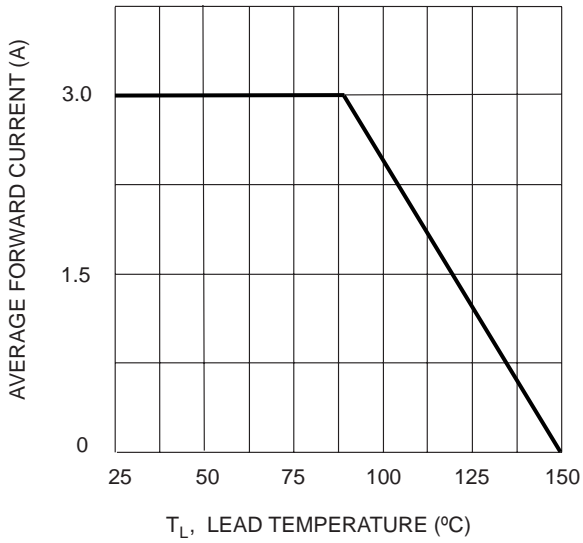


Fig. 2 Typ. Forward Characteristics

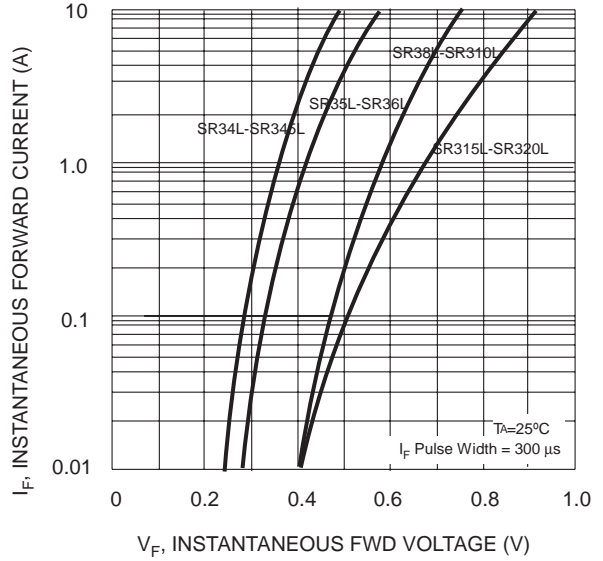


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

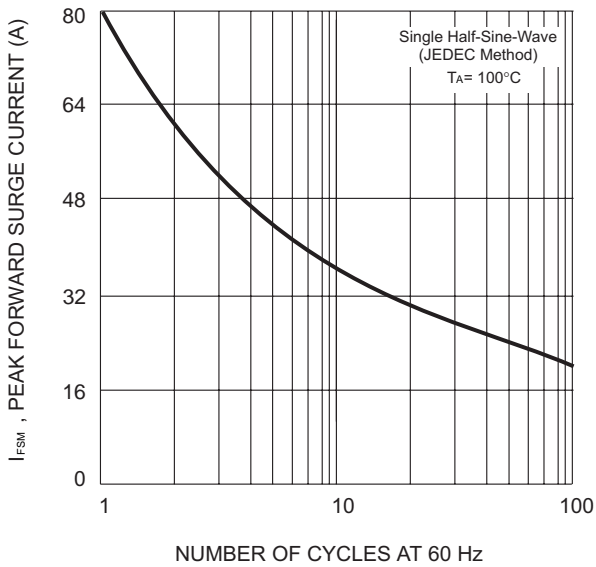


FIG.4 TYPICAL REVERSE CHARACTERISTIC

