

SR32 THRU SR39

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage – 20 to 90 V

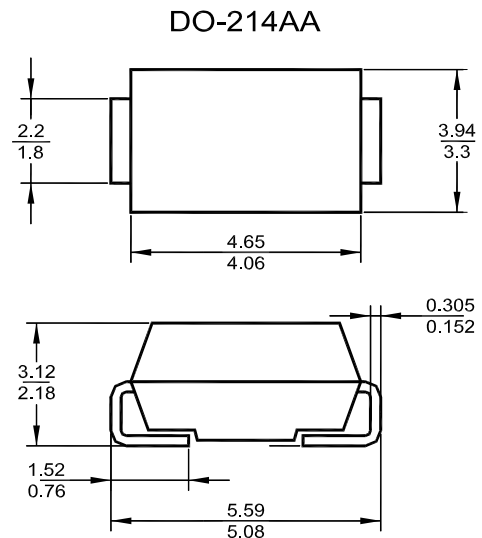
Forward Current – 3 A

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, High efficiency
- High forward surge current capability
- For surface mounted applications
- High temperature soldering guaranteed: 250 °C /10 seconds at terminals.

Mechanical Data

- **Case:** Molded plastic body, JEDEC DO-214AA
- **Terminals:** leads solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any



Dimensions in millimeters

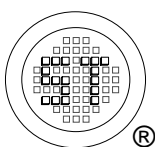
Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	SR32	SR33	SR34	SR35	SR36	SR38	SR39	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	64	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.5	0.75				0.85	V	
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	0.5 20							mA
Typical Junction Capacitance ¹⁾	C_{tot}	500				300			pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	75							°C/W
Operating Junction Temperature Range	T_J	- 65 to + 125				- 65 to + 150			°C
Storage Temperature Range	T_{stg}	- 65 to + 125							°C

¹⁾ Measured at 1MHz and applied reverse voltage of 4 V DC.

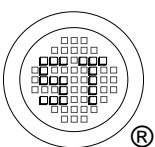
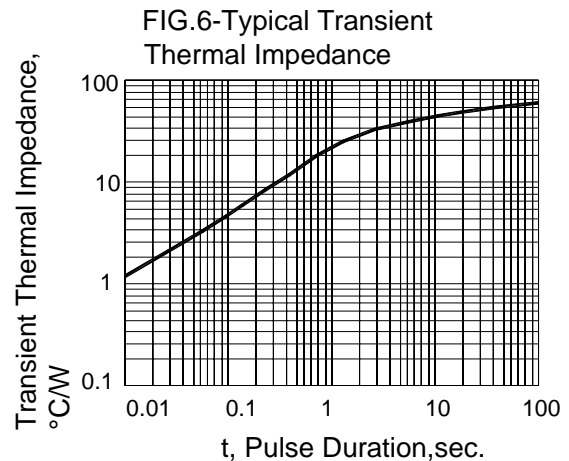
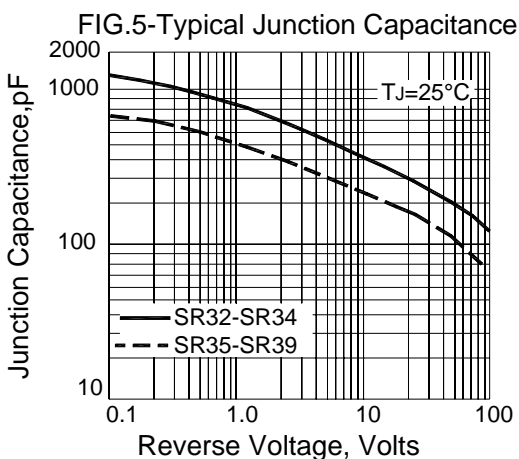
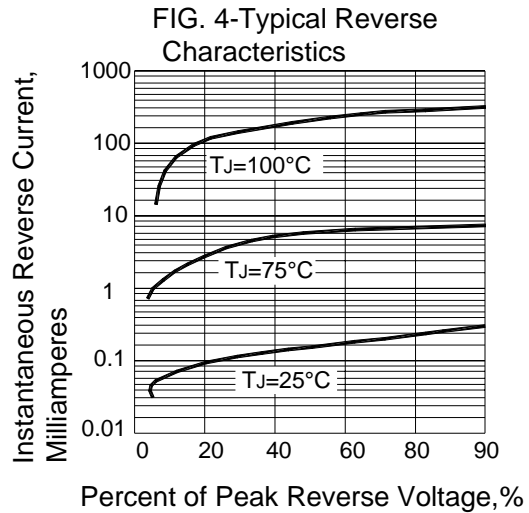
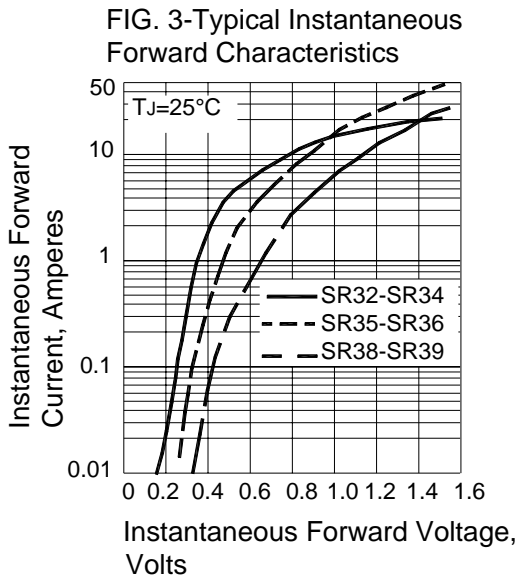
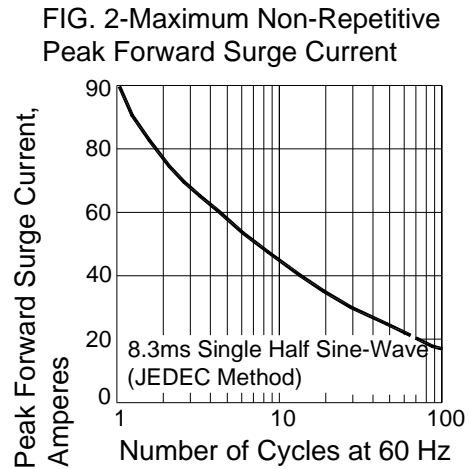
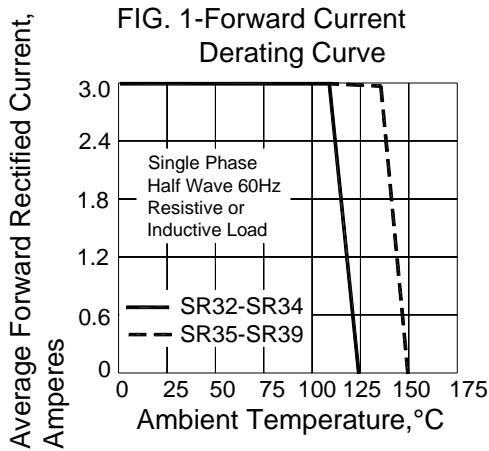
²⁾ P.C.B, mounted with 0.2 × 0.2" (5 × 5 mm) copper pad areas.



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