

SR3A THRU SR3M

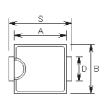
SURFACE MOUNT FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 1000 Volts

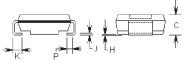
Forward Current - 3.0 Amperes

Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering: 260°C/10 seconds at terminals
- Fast recovery times for high efficiency



SMC



Mechanical Data

- Case: SMC molded plastic
- Terminals: Solder plated solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 0.007 ounce, 0.25 gram

D IM E N S IO N S										
DIM	inches		m	Note						
	M in.	Max.	M in .	Max.	Note					
А	0.260	0.280	6.60	7.11						
В	0.220	0.240	5.59	6.10						
С	0.075	0.095	1.90	2.41						
D	0.115	0.121	2.92	3.07						
н	0.0020	0.0060	0.051	0.152						
J	0.006	0.012	0.15	0.30						
к	0.030	0.050	0.76	1.27						
Р	0.020	REF	0.51							
s	0.305	0.320	7.75	8.13						

Maximum Ratings and Electrical Characteristics

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

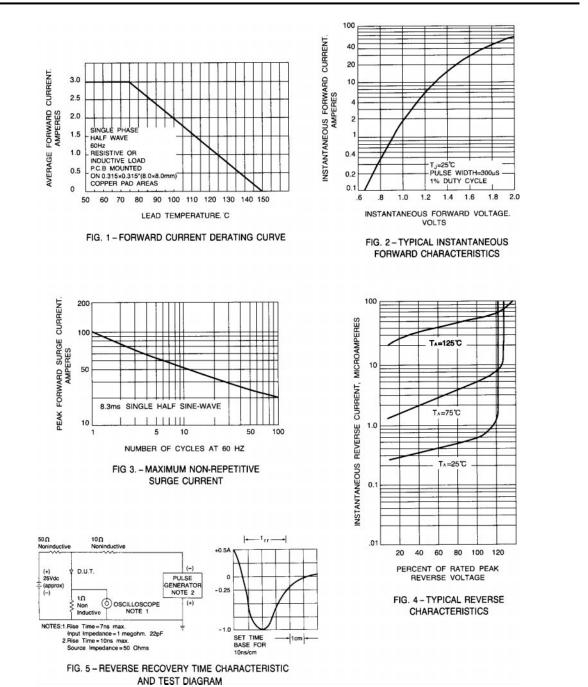
	Symbols	SR3A	SR3B	SR3D	SR3G	SR3J	SR3K	SR3M	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_{\rm L}\text{=}75^\circ\!\!\!\!\!\!{\rm C}$	I _(AV)	3.0							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I _{fsm}	100.0							Amps
Maximum instantaneous forward voltage at 3.0A	V _F	1.3							Volts
$\begin{array}{llllllllllllllllllllllllllllllllllll$	I _R	10.0 350.0							μA
Maximum reverse recovery time (Note 1)	T _{rr}	150 250 500						00	nS
Typical junction capacitance (Note 2)	C	60.0							ρF
Maximum thermal resistance (Note 3)	R _{⊎JL} R _{⊎JA}	15.0 50.0						°C/W	
Operating and storage temperature range	T _J , T _{stg}	-50 to +150						°C	

Notes:

(1) Reverse recovery test conditions: I_{\rm F}=0.5A, I_{\rm R}=1.0A, I_{\rm r}=0.25A

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

(3) 8.0mm² (0.013mm thick) land areas



RATINGS AND CHARACTERISTIC CURVES