



# SRR0 THRU SRR6

## SURFACE MOUNT FAST SWITCHING RECTIFIER

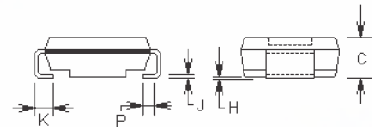
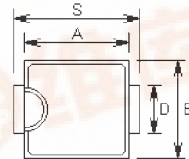
Reverse Voltage - 50 to 600 Volts

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

DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.280	0.280	6.80	7.11	
B	0.220	0.240	5.59	6.10	
C	0.075	0.095	1.90	2.41	
D	0.115	0.121	2.92	3.07	
H	0.0020	0.0060	0.051	0.152	
J	0.006	0.012	0.15	0.30	
K	0.030	0.050	0.76	1.27	
P	0.020 REF		0.51 REF		
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	SRR0	SRR1	SRR2	SRR4	SRR6	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_L=50^\circ\text{C}$	$I_{(AV)}$	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
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	10.0 350.0					$\mu\text{A}$
Maximum reverse recovery time (Note 1)	$T_{rr}$	150					nS
Typical junction capacitance (Note 2)	$C_J$	60.0					$\mu\text{F}$
Maximum thermal resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	15.0 50.0					$^\circ\text{C/W}$
Operating and storage temperature range	$T_{J'}$ , $T_{STG}$	-50 to +125					$^\circ\text{C}$

Notes:

(1) Reverse recovery test conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_T=0.25\text{A}$

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



# RATINGS AND CHARACTERISTIC CURVES

