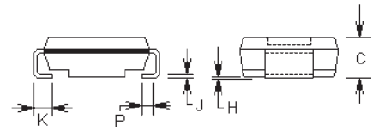
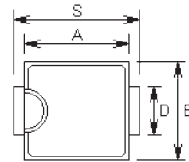


### Features

- 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

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	0.260	0.280	6.60	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	0.0080	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	SN21	SN22	SN23	SN24	SN25	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1300	Volts
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	920	Volts
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1300	Volts
Maximum average forward rectified current at $T_L=75^\circ\text{C}$	$I_{(AV)}$	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	$V_F$	1.20					Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0 250.0					$\mu\text{A}$
Typical reverse recovery time (Note 1)	$T_{rr}$	2.0					$\mu\text{S}$
Typical junction capacitance (Note 2)	$C_J$	60.0					$\mu\text{F}$
Maximum thermal resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	47.0 13.0					$^\circ\text{C/W}$
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150					$^\circ\text{C}$

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  $V_F=4.0$  volts
- (3) 8.0mm<sup>2</sup> (0.013mm thick) land areas

# RATINGS AND CHARACTERISTIC CURVES

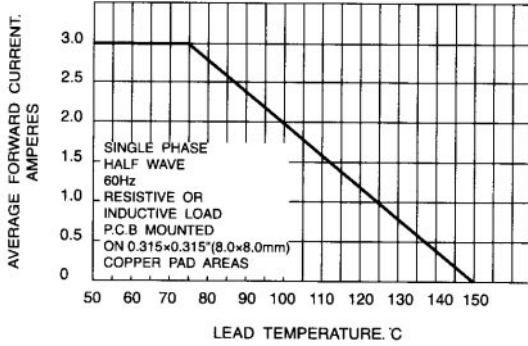


FIG. 1 - FORWARD CURRENT DERATING CURVE

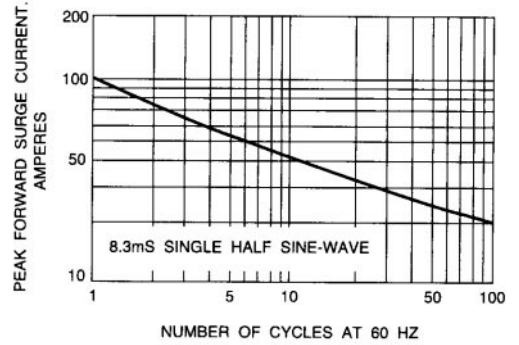


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

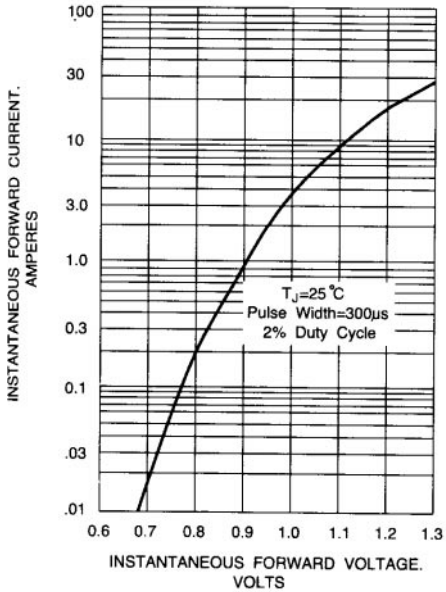


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

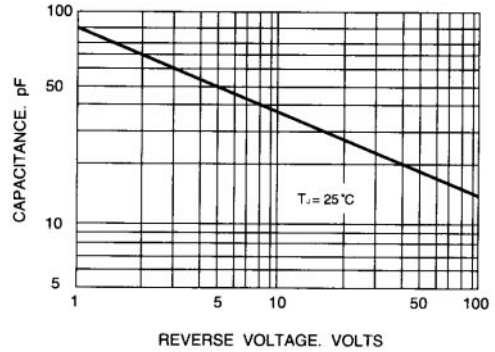


FIG. 4 - TYPICAL JUNCTION CHARACTERISTICS

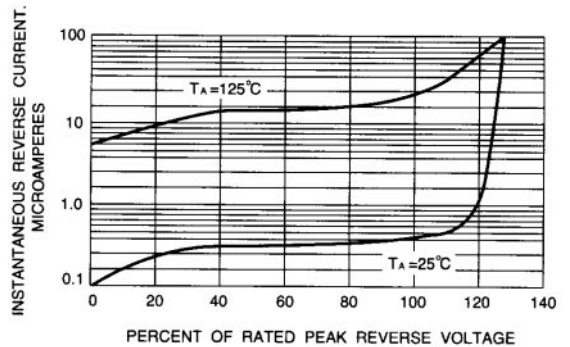


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS