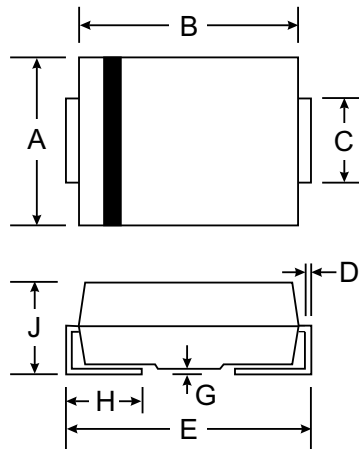


### Features

- High current capability
- High surge current capability
- High reliability
- High efficiency
- Low power loss
- Low cost
- Low forward voltage drop
- Pb / RoHS Free



SMC		
Dim	Min	Max
A	5.40	6.22
B	6.10	7.11
C	2.92	3.18
D	0.15	0.40
E	7.55	8.13
G	0.10	0.21
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

### Mechanical Data

- Case : SMC Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead Formed for Surface Mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.21 gram

### Maximum Ratings and Electrical Characteristics

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

RATING	SYMBOL	SK 52	SK 53	SK 54	SK 55	SK 56	SK 57	SK 58	SK 59	SK 5B	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	70	80	90	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	49	56	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	70	80	90	100	V
Maximum Average Forward Current See Fig.1	$I_{F(AV)}$	5.0									A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150									A
Maximum Forward Voltage at $I_F = 5$ A (Note 1)	$V_F$	0.55			0.67			0.79			V
Maximum Reverse Current at $T_a = 25$ °C	$I_R$	0.5									mA
Rated DC Blocking Voltage (Note 1) $T_a = 100$ °C	$I_{R(H)}$	50			25						mA
Junction Temperature Range	$T_J$	- 65 to + 125				- 65 to + 150					°C
Storage Temperature Range	$T_{STG}$	- 65 to + 150									°C

**Note :**

(1) Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle = 2%.



## RATING AND CHARACTERISTIC CURVES ( SK52 - SK5B )

FIG.1 - FORWARD CURRENT DERATING CURVE

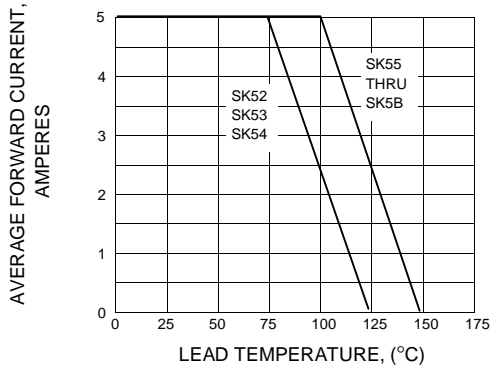


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

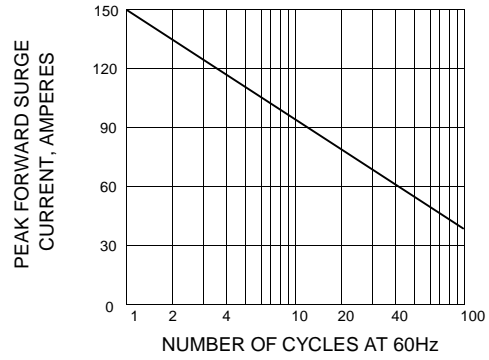


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

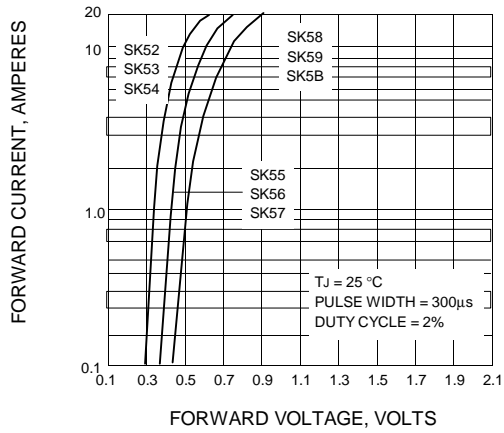


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

