

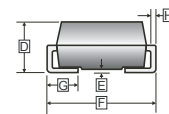
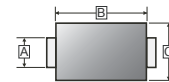
RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

## FEATURES

- Low profile package
- Ideal for automated placement
- Low reverse current
- Fast reverse recovery time
- Component in accordance to RoHS 2002/95/EC

SMC



## MECHANICAL DATA

- Cases : DO-214AB(SMC)
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead Free Plating(Tin Finish)  
Solderable Per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight : 0.231 grams(approximate)

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.750	3.250	E	-	0.203
B	6.520	7.110	F	7.750	8.130
C	5.590	6.220	G	0.760	1.520
D	2.000	2.620	H	0.150	0.305

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETERS	SYMBOL	PART NUMBERS							UNITS
		SEF 501C	SEF 502C	SEF 503C	SEF 504C	SEF 505C	SEF 506C	SEF 507C	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F</sub>	5.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100							A
Maximum Instantaneous Forward Voltage @ 3.0A	V <sub>F</sub>	1.00		1.30		1.70		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @TA=25°C	I <sub>R</sub>	5.0							μA
@TA=100°C		100							
Typical Junction Capacitance (NOTE1)	C <sub>J</sub>	80							pF
Maximum Reverse Recovery Time (NOTE2)	T <sub>rr</sub>	50				75			ns
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	50							°C / W
Storage and Operating Temperature Range	T <sub>STG</sub> , T <sub>J</sub>	-55 ~ 150							°C

### NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A

**CHARACTERISTIC CURVES**

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

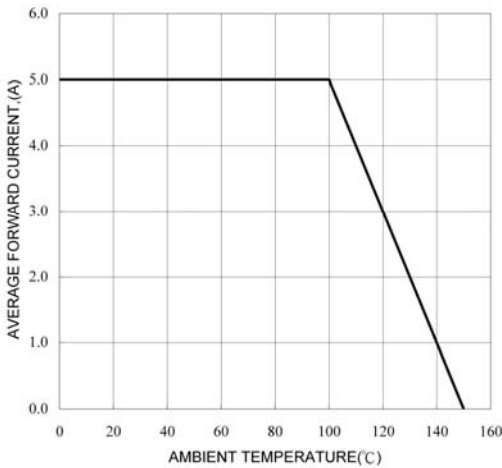


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

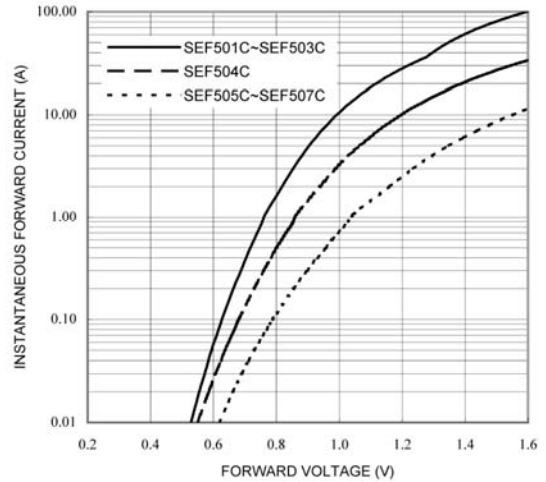


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

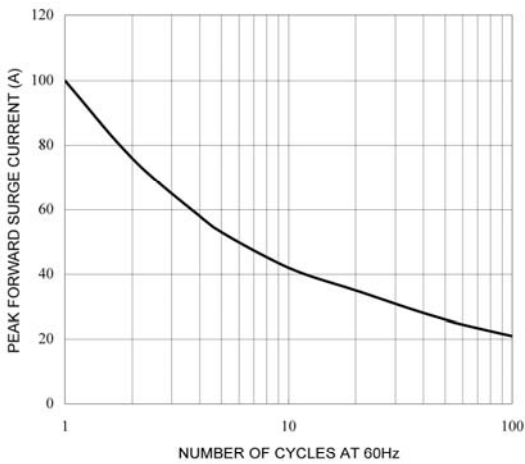


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

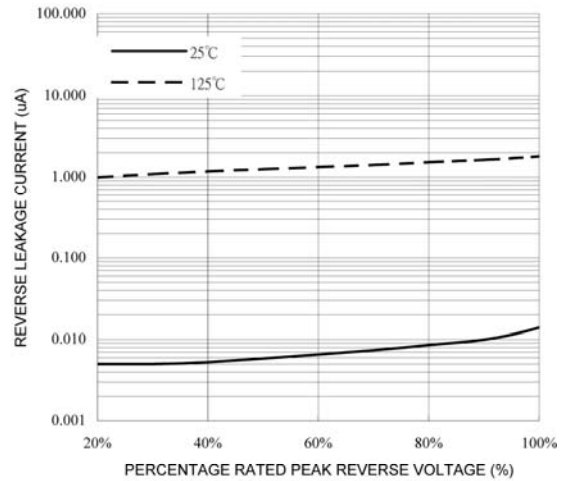


FIG. 5-TYPICAL JUNCTION CAPACITANCE

