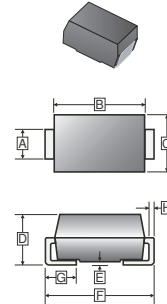


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

SMC

FEATURES

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



MECHANICAL DATA

- Case: 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 (approximately)

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 ($T_A=25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	PART NUMBERS							UNIT
		SEF 301C	SEF 302C	SEF 303C	SEF 304C	SEF 305C	SEF 306C	SEF 307C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I_F	3.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80.0							A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	1.0		1.3		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5.0							μA
	$T_A=100^\circ\text{C}$	100							
Maximum Reverse Recovery Time	T_{RR}	50				75			nS
Typical Junction Capacitance ²	C_J	80				50			pF
Typical Thermal Resistance ¹	$R_{\theta JA}$	70							$^\circ\text{C}/\text{W}$
Operating & Storage Temperature	T_J, T_{STG}	-55~150, -55~150							$^\circ\text{C}$

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVES (SEF301C THRU SEF307C)

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

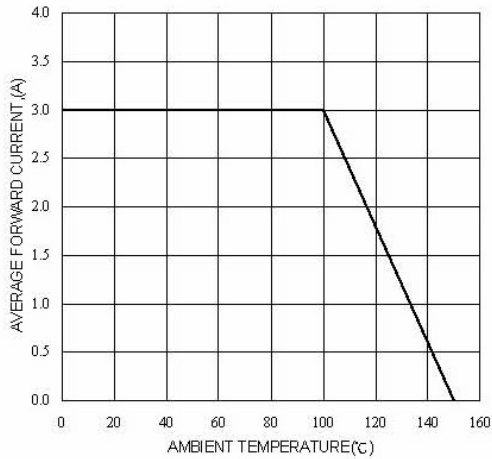


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

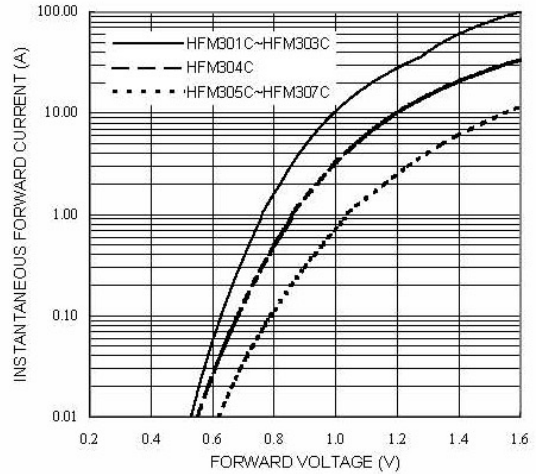


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

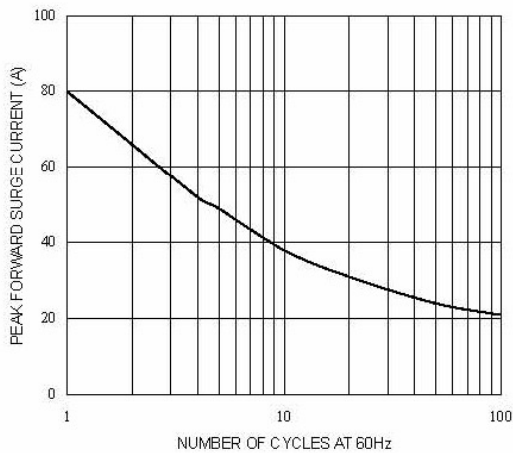


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

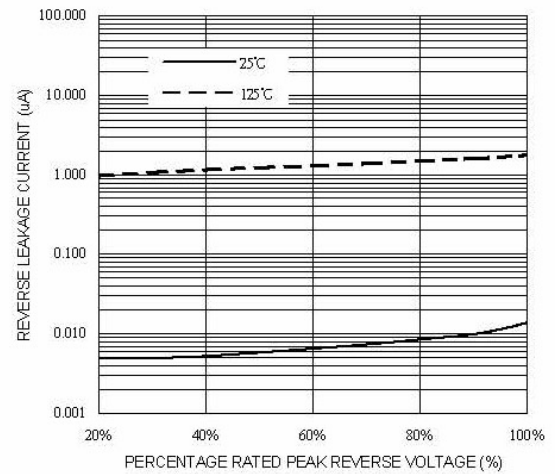


FIG. 5-TYPICAL JUNCTION CAPACITANCE

