

Surface Mount Fast Recovery Rectifiers

(Pb) Lead(Pb)-Free

Features:

- * Plastic package has Underwriters Laboratory
- * Flammability Classification 94V-O Utilizing Flame
- * Retardant Epoxy Molding Compound.
- * For surface mounted applications.
- * Exceeds environmental standards of MIL-S-19500 / 228
- * Low leakage current.

Mechanical Data:

- * Case : Molded plastic, JEDEC DO-214AB
- * Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity : Indicated by cathode band
- * Mounting Position : Any
- * Weight : 0.195 gram

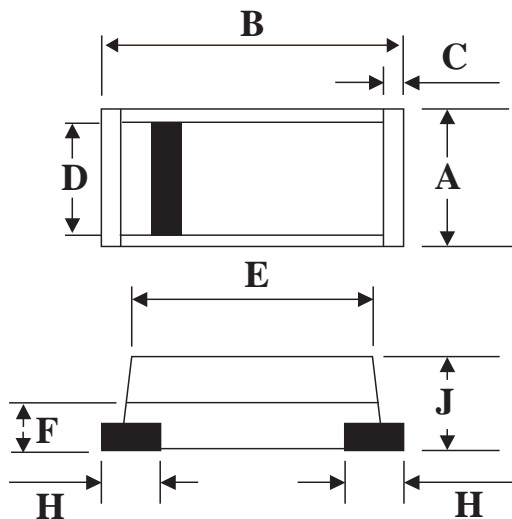
REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
3.0 AMPERE



SMC-1

SMC-1 Outline Dimension

unit:mm



SMC-1		
Dim	Min	Max
A	4.20	4.80
B	6.60	7.20
C	0.30(TYP)	-
D	3.60	3.80
E	5.80	6.20
F	0.80(TYP)	-
H	1.00(TYP)	-
J	1.90	2.50

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristics	Symbol	FFM 301	FFM 302	FFM 303	FFM 304	FFM 305	FFM 306	FFM 307	Unit
Maximum Recurrent 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 @ $T_A=55^{\circ}\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100							A
Maximum Instantaneous At 3.0A DC	V_F	1.3							V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$	I_R	10 300							μA
Maximum Reverse Recovery Time	T_{rr}	150					250	500	μs
Typical Junction Capacitance (Note 1)	C_J	60(Typ)							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50(Typ)							$^{\circ}\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to+150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to+150							$^{\circ}\text{C}$

Device Marking

Item	Marking	Item	Marking
FFM301	F31	FFM305	F35
FFM302	F32	FFM306	F36
FFM303	F33	FFM307	F37
FFM304	F34		