

VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A

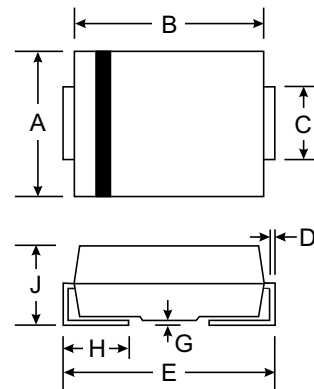


Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter Symbol	symbol	HFM 101	HFM 102	HFM 103	HFM 104	HFM 105	HFM 106	HFM 107	HFM 108	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RSM voltage	V_{RSM}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 75^\circ\text{C}$	$I_F(AV)$	1.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30								A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at $T_A = 55^\circ\text{C}$	$I_R(AV)$	100								μA
Typical thermal resistance (Note 2)	$RA_{\theta J}$	50								C/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150								C

Electrical Characteristics Ratings at 25 C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	HFM 101	HFM 102	HFM 103	HFM 104	HFM 105	HFM 106	HFM 107	HFM 108	Unit	
Maximum instantaneous forward voltage at 1.0A	V_F	1.00		1.30		1.85				V	
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	5.0					50				μA
Typical reverse recovery time (Note 1)	t_{rr}	50					75				ns
Typical junction capacitance at 4.0V, 1MHz	C_J	17								PF	

NOTES:

1. $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

Fig. 1 Forward Current Derating Curve

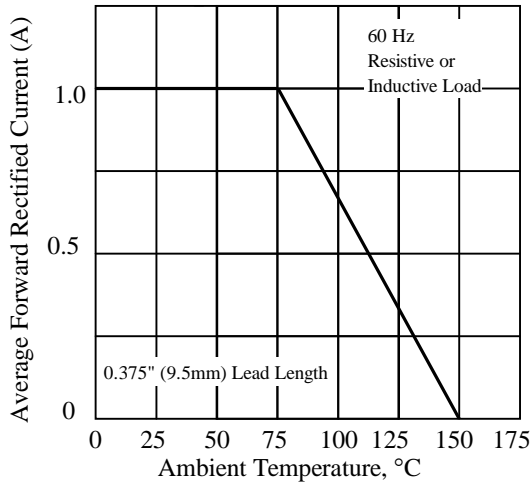


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

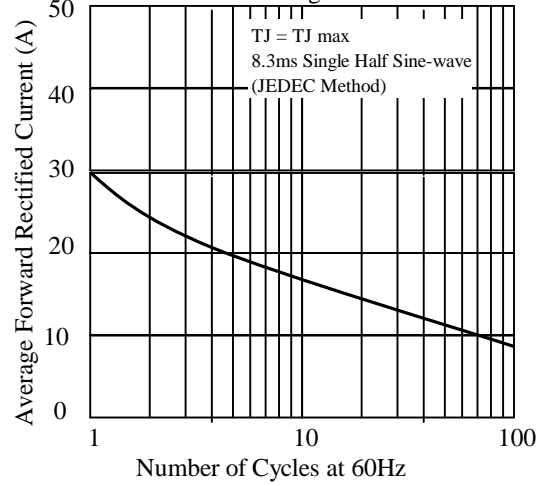


Fig. 3. Typical Instantaneous Forward Characteristics

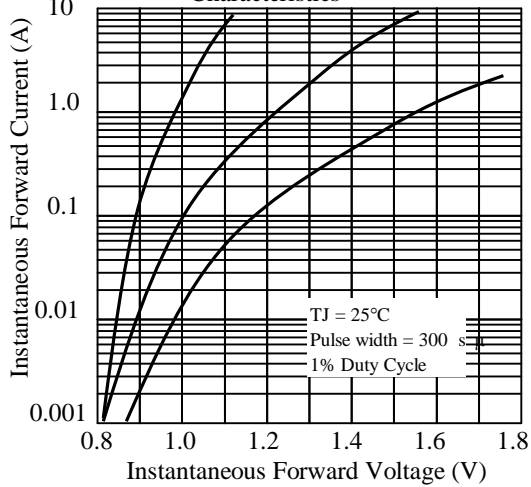


Fig 4- Typical Reverse Characteristics

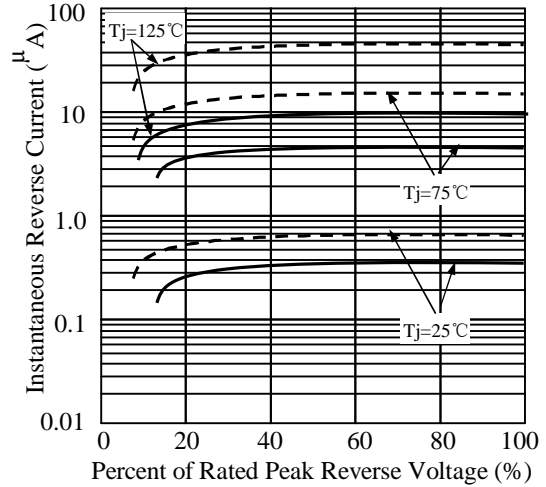


Fig 5. typical transient thermal impedance

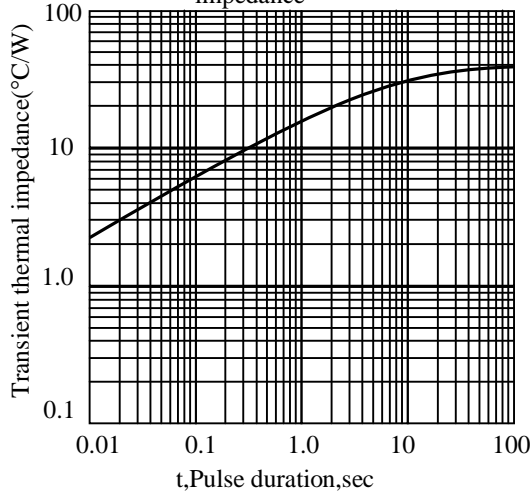


Fig 6. Typical Junction Capacitance

