

MBRA340F

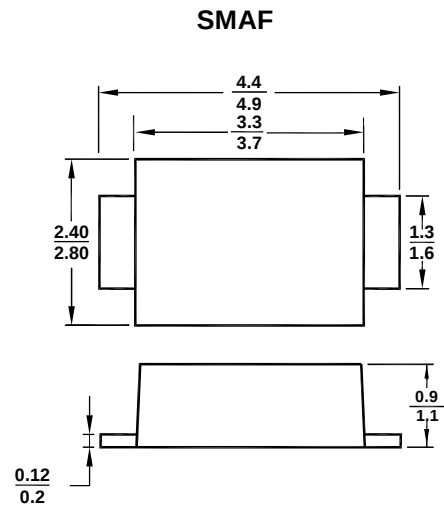
Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 V

Forward Current - 3 A

Features

- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



All Dimensions in mm

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	Value	Unit
	Marking	A340	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum DC Blocking Voltage	V_R	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage $T_a = 25^\circ\text{C}$ at 3 A $T_a = 100^\circ\text{C}$	V_F	0.45 0.39	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	0.3 15	mA
Thermal Resistance, Junction to Ambient ¹⁾	$R_{\theta JA}$	81	°C/W
Thermal Resistance, Junction to Lead ¹⁾	$R_{\theta JL}$	15	°C/W
Junction Temperature Range	T_j	- 55 to + 150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

¹⁾ Mounted on 2" square PC Board with 1" square total pad size, PC Board FR4.

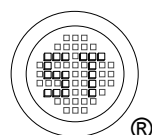


Fig.1 Forward Current Derating Curve

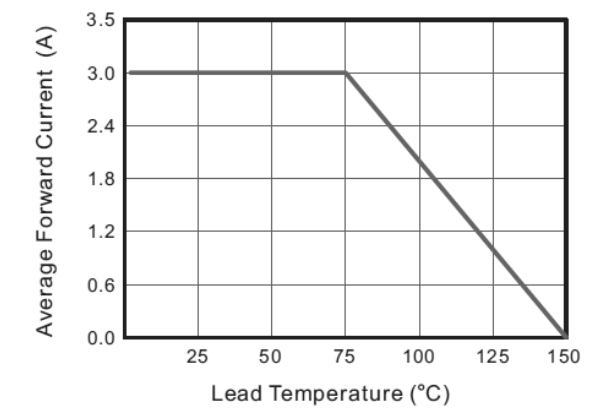


Fig.2 Typical Reverse Characteristics

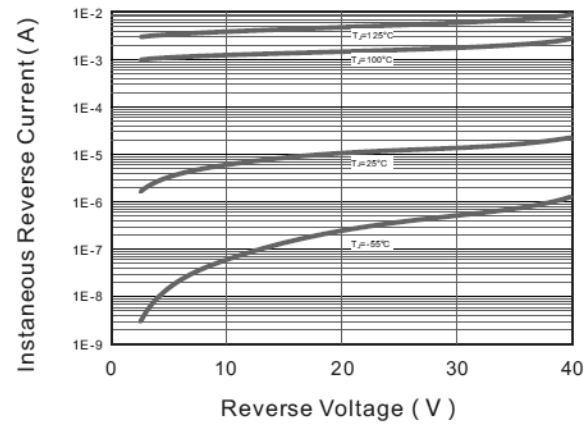


Fig.3 Typical Forward Characteristic

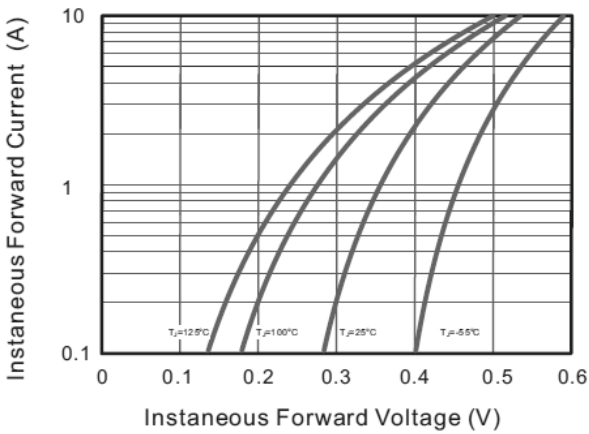


Fig.4- Typical Transient Thermal Impedance

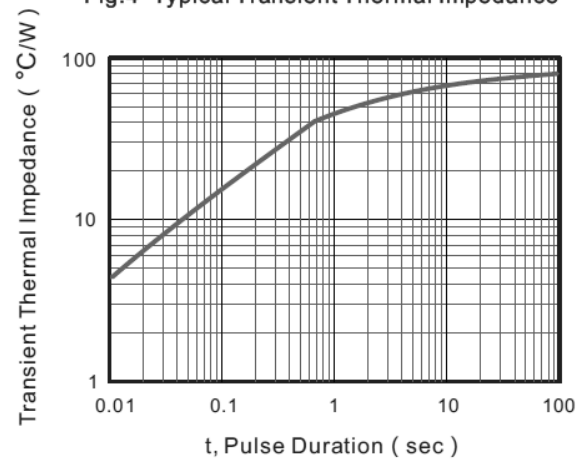


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

