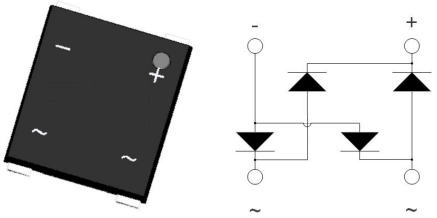
FMSB610

6A Glass Passivated Single-Phase Bridge Rectifier

Features

- ◆ Glass Passivated Chip
- ◆ Fast Reverse Recovery Time
- ◆ High Surge Current Capability
- ◆ Low Reverse Leakage Current
- ◆ Case to Terminal Isolation Voltage 2500V



Application

- ◆ Fast Charger
- ◆ Household Electric Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier

Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 0.24 Grams

Maximum Ratings and Thermal Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter		Rating	Unit
V_{RRM}	Recurrent Peak Reverse Voltage		1000	V
$I_{F(AV)}$	Average Forward Output Rectified Current, T_A = 120°C		6.0	A
V_F	Forward Voltage Per Leg, I_{FM} = 6.0A		1.3	V
I_{FSM}	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		135	A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A = 25°C	5.0	μA
		T_A = 125°C	500	
T_{rr}	Maximum Reverse Recovery Time		500	nS
i^2t	Rating for Fusing (t < 8.3ms)		75.6	A^2S
V_{isol}	Rms Isolation Voltage from Case to Leads		2500	V
C_J	Typical Junction Capacitance		42	pF
$R_{\theta JC}$	Maximum Thermal Resistance Per Leg		4.2	°C/W
T_J, T_{STG}	Operating Junction and Storage Temperature Range		-55 to 150	°C

Notes:

a. Junction to case with heatsink.

b. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

■ Characteristic Curve

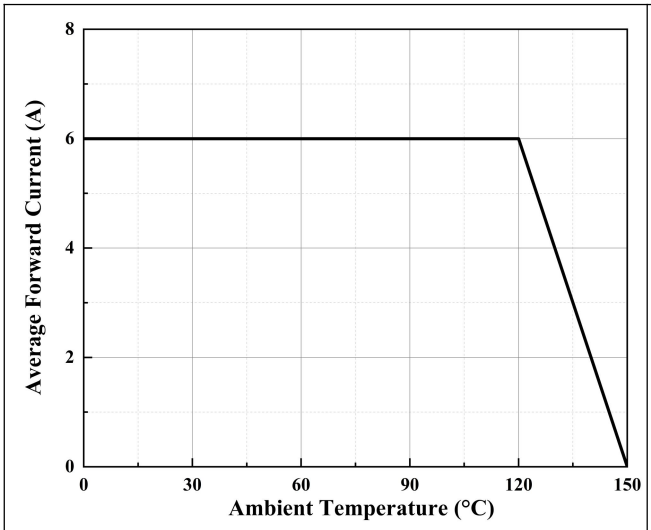


Figure 1. Forward Current Derating Curve

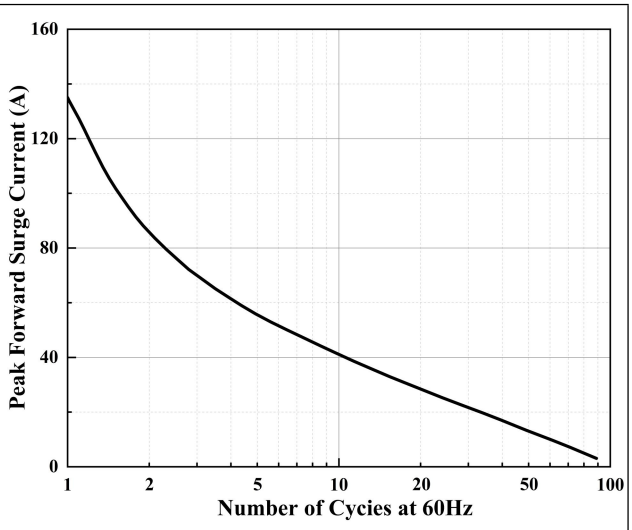


Figure 2. Maximum Non-Repetitive Surge Current

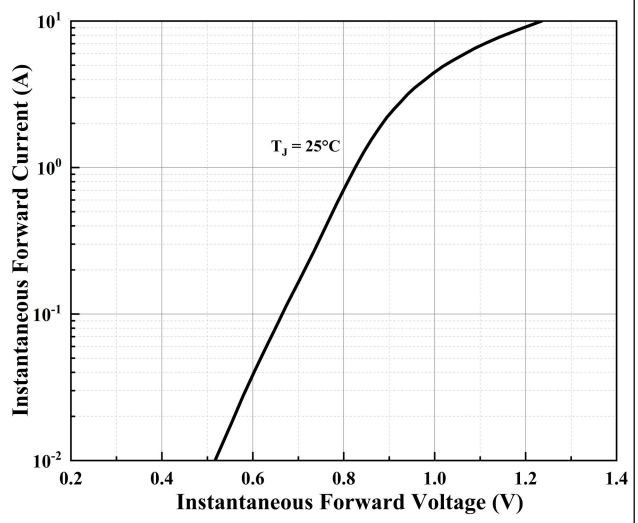


Figure 3. Typical Forward Characteristics Per Diode

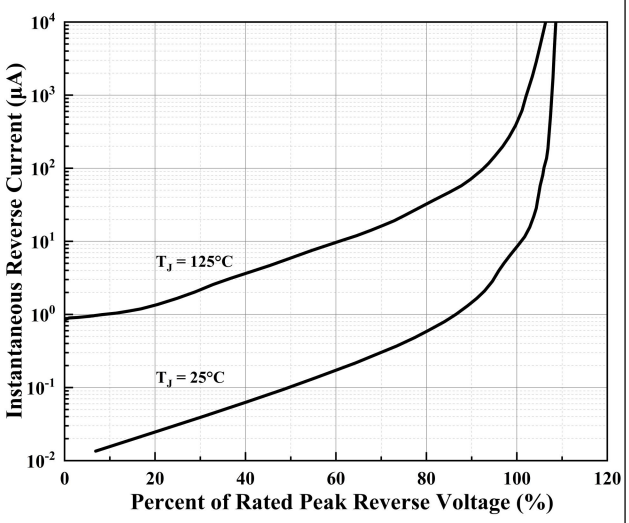


Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information