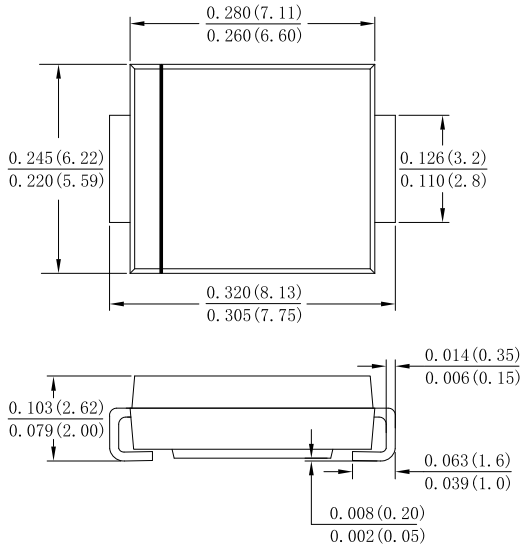
MURS460U

4.0 AMP Ultrafast Glass Passivated Rectifiers

Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High current capability
- High reliability
- Metal silicon junction,majority carrier conduction
- Plastic Case Material has UL Flammability
- Classication Rating 94V-0

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic SMC
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: as marked on case
- Mounting Position: Any
- Making: Type Number

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified
Single phase,half wave,60Hz,resistive or inductive load
For capacitive load derate current by 20%

Parameter	Symbol	MURS460U	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V_{RRM} V_{RWM} V_{DC}	600	V
RMS Rectified Voltage	$V_{R(RMS)}$	420	V
Average Rectified Output Current	$I_{F(AV)}$	4.0	A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 8.3ms Single half sine-wave@$T_{j=125}$ ℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	200 160	A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 1.0ms Single half sine-wave @$T_{j=125}$℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	400 320	A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	150	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	166	A^2s
Forward Voltage Drop T_A =25 ℃ @IF=4A	V_{FM}	1.3	V
Peak Reverse Curent T_j =25℃ At Rated DC Blocking Voltage T_j =125℃	I_R	5 100	uA
Typical Junction Capacitance (Note 1)	C_J	50	pF
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$	41	℃/W
Maximum Reverse Recovery Time(Note 3)	Trr	50	ns
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150	℃

Note: 1.Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2.Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A

Fig. 1 Forward Current Derating Curve

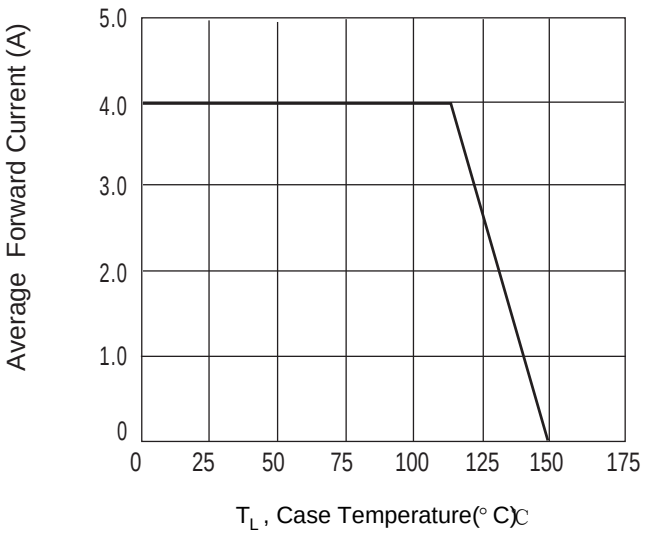


Fig. 2 Typ. Forward Characteristics

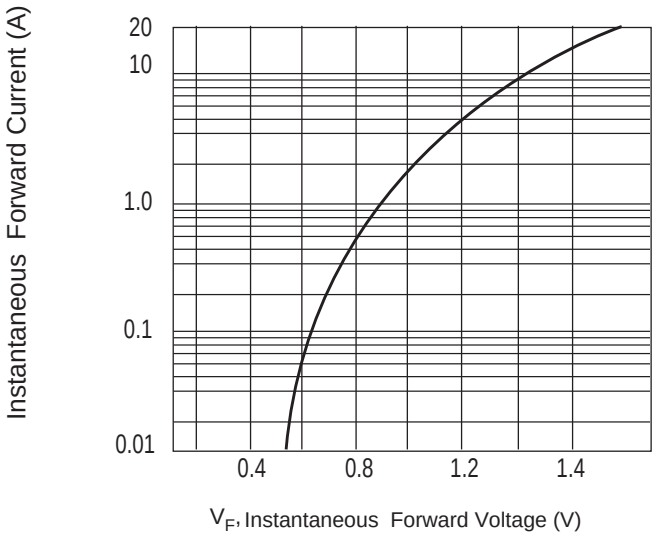


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

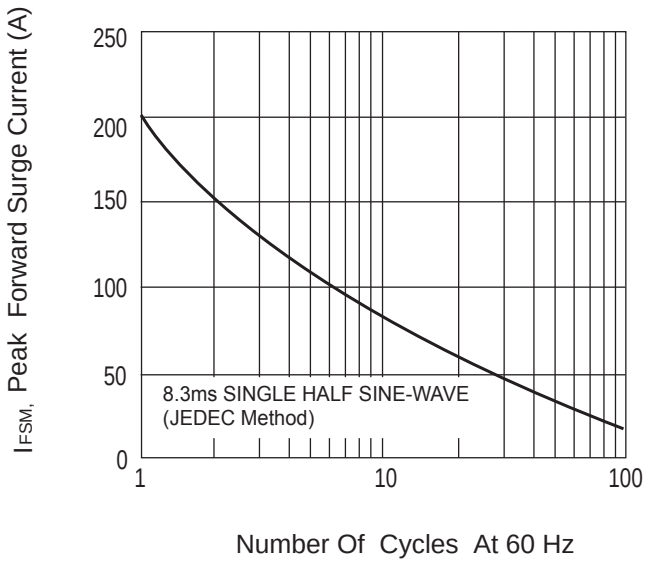


Fig.4 Typical Reverse Chracteristics

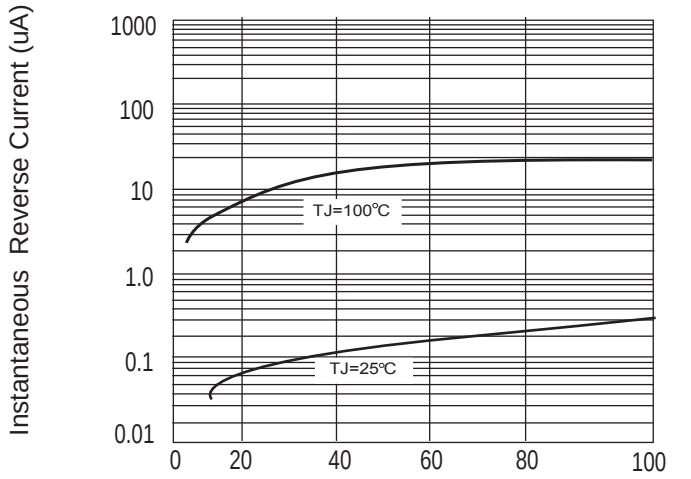
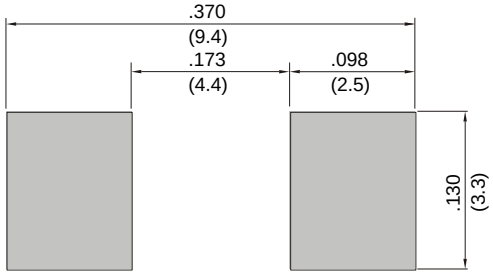


Fig.5 Mounting PAD Layout



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