



MURS420 THRU MURS460

4.0 AMP Surface Mount Glass Ultra Fast Rectifier

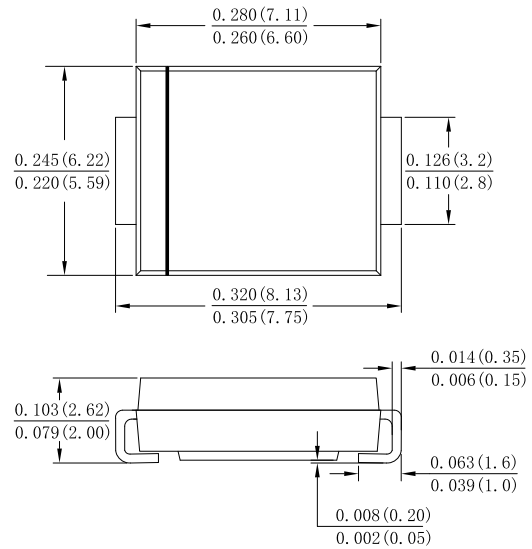
Features

- 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
- Classification Rating 94V-0

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
- Marking: Type Number

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	Symbols	MURS420	MURS440	MURS460	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	400	600	V
Maximum RMS Voltage	V _{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	200	400	600	V
Average Rectified Output Current @T _L =100°C	I _{F(AV)}	4.0			A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	125			A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	64.844			A ² S
Forward Voltage @IF=4.0A	V _F	0.95	1.30		V
Peak Reverse Current @T _A =25°C	I _R	5.0			uA
At Rated DC Blocking Voltε @T _A =100°C		50			
Maximum reverse recovery time (Note 1)	T _{RR}	35	50		ns
Typical Junction Capacitance (Note 2)	C _J	35			pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	85			°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150			°C

Note:

1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

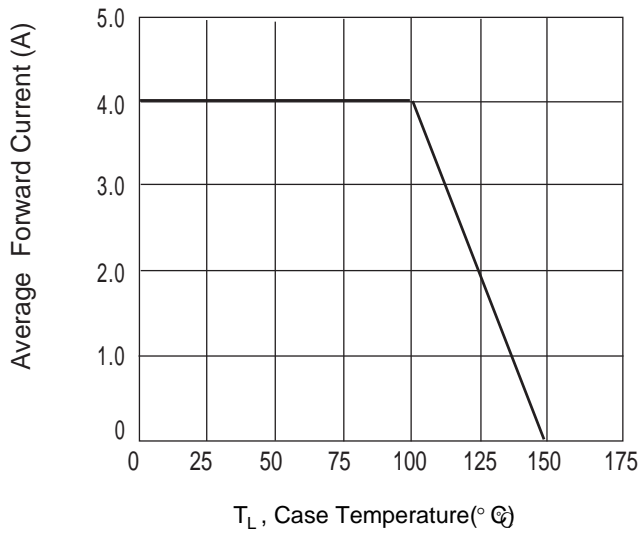


Fig. 2 Typ. Forward Characteristics

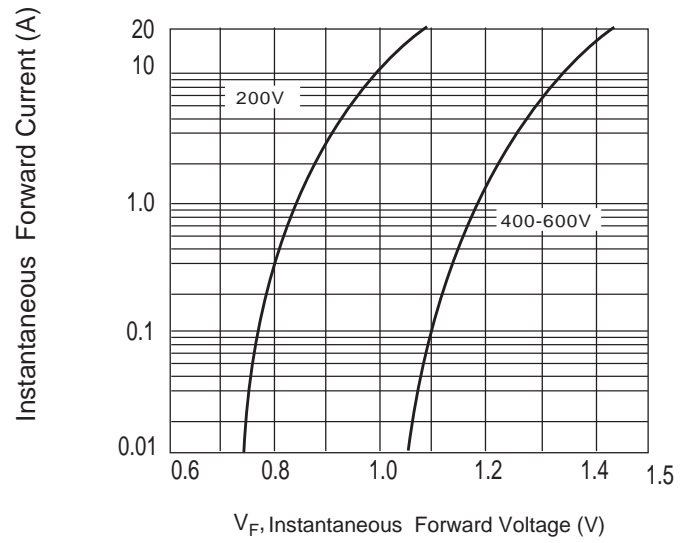


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

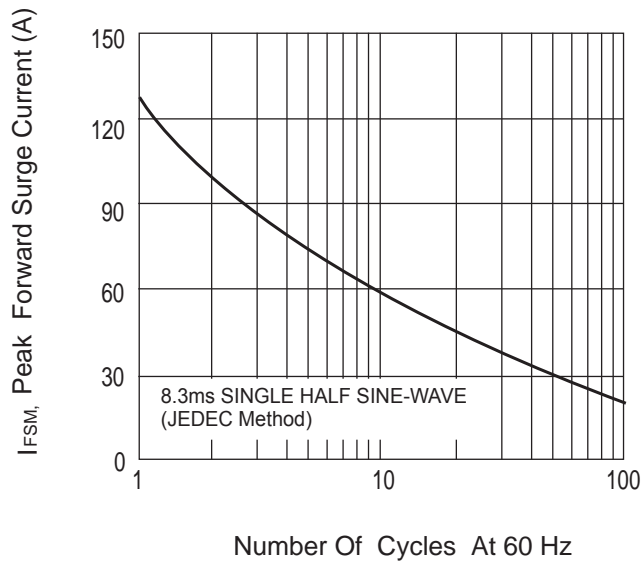


Fig.4 Typical Reverse Characteristics

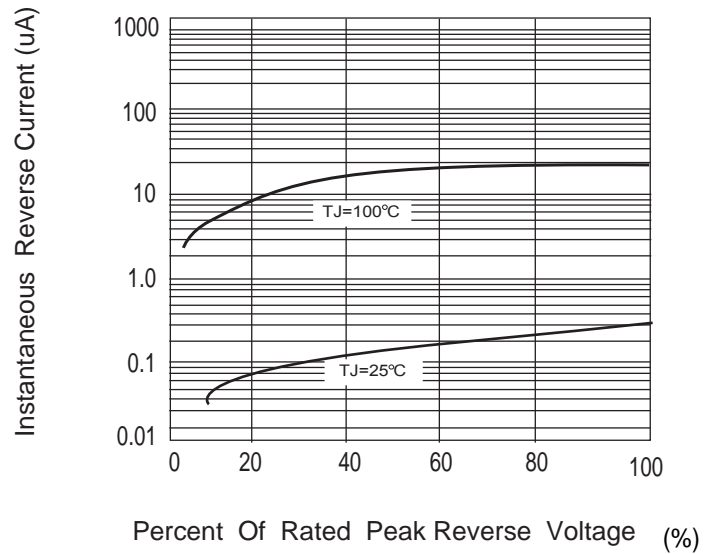
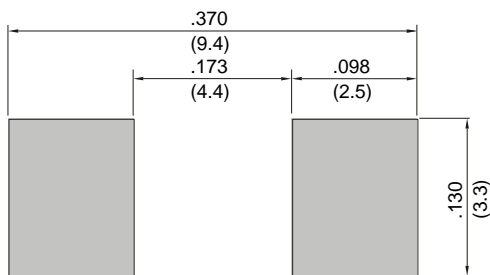


Fig.5 Mounting PAD Layout





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