

**GLASS PASSIVATED SILICON RECTIFIER**

**VOLTAGE RANGE 600 Volts CURRENT 16.0 Amperes**

**FEATURES**

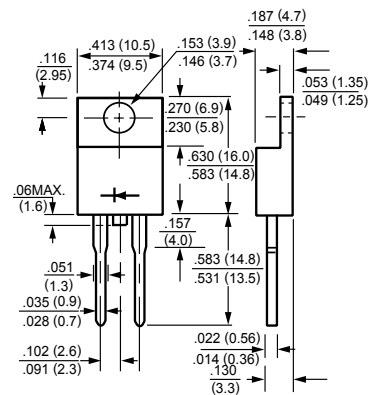
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: TO-220A molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Mounting position: Any



**TO-220A**



**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, derate current by 20%.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	MUR1660	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	600	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	420	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> = 100 °C	I <sub>O</sub>	16.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	250	Amps
Typical Current Squared Time	I <sup>2</sup> t	260	A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	6.6	°C/W
	R <sub>θJA</sub>	8.3	
Total Junction Capacitance (Note 2)	C <sub>t</sub>	265	pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MUR1660	UNITS
Maximum Instantaneous Forward Voltage at 16.0A DC	V <sub>F</sub>	1.5	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@T <sub>A</sub> = 25°C	1.0
		@T <sub>A</sub> = 125°C	500
Maximum Reverse recovery time(Note 4)	T <sub>rr</sub>	50	nS

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. " ROHS compliant".  
4. IF= 0.5A,Irr= 0.25A,IR =1.0A.

## RATING AND CHARACTERISTICS CURVES ( MUR1660 )

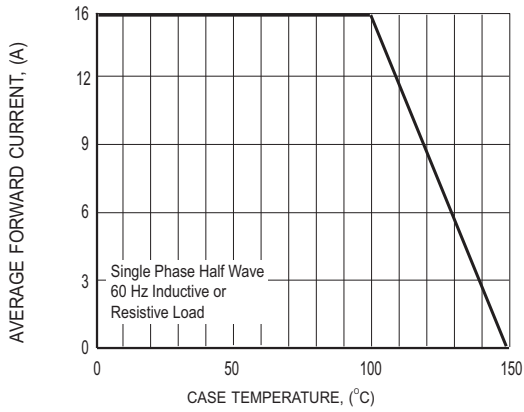


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

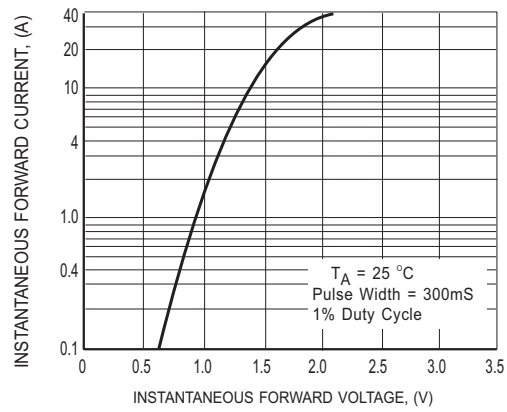


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

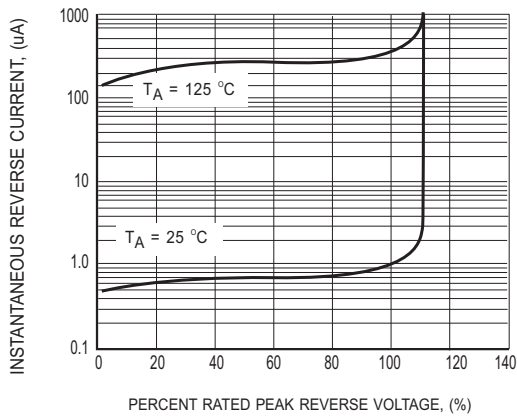


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

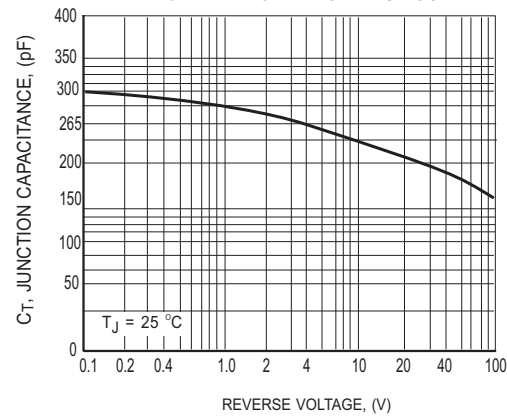


FIG.4 TOTAL JUNCTION CAPACITANCE

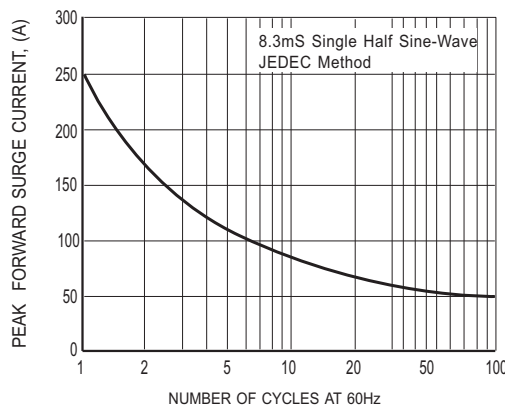


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

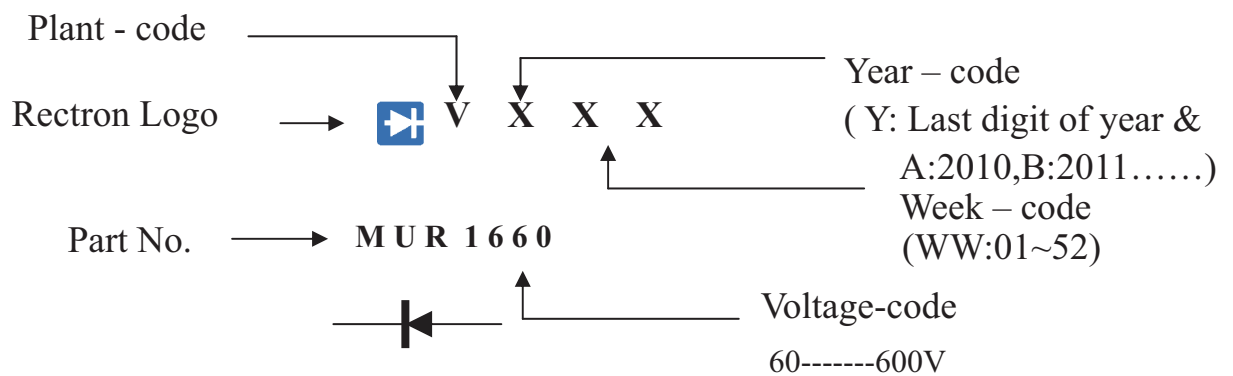


## Attachment information about MUR1660

### 1. Internal Circuit



### 2. Marking on the body



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

## TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
(I)TO-220/TO-220(A)	-C	2,000	550*140*92	572*308*120	4,000	11.80

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