

## MUR160

**Voltage: 600 Volts**

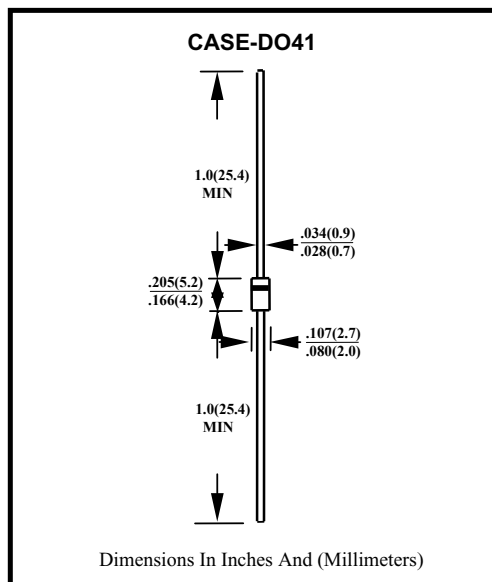
**Current: 1.0 A**

### Features

- Low power loss, high efficiency
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Speed Switching
- High Reliability
- High Current Surge
- Glass Passivated Chip Junction

### Mechanical data

- Case: GMolded Plastic
- Epoxy: GUI 94v-0 Rate Flame Retardant
- Lead: GMil-Std-202e Method 208c Guaranteed
- Mounting Position: GAny



## Maximum Ratings and Electrical Characteristics

RATINGS	SYMBOL	MUR160	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	600	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	420	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	600	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT .375" (9.5mm) LEAD LENGTH AT $T_A=55^{\circ}C$	$I_O$	1	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	35	A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	20	PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{gja}$	15	$^{\circ}C/W$
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150	$^{\circ}C$
OPERATING TEMPERATURE RANGE	$T_{OP}$	- 55 TO + 150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS ( $A_T T_A=25^{\circ}C$ UNLESS OTHERWISE NOTED)

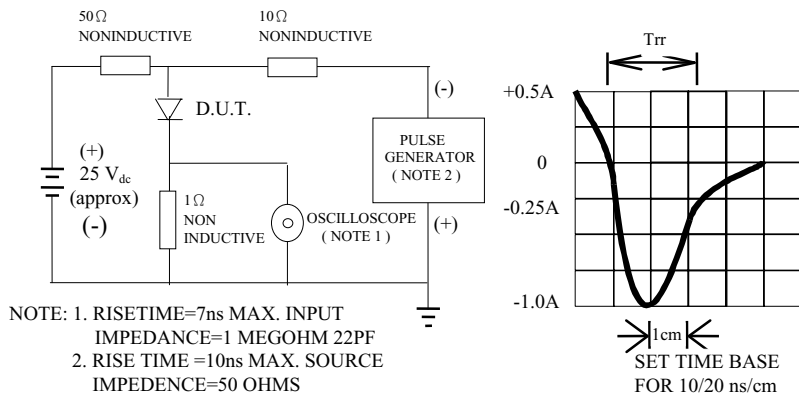
CHARACTERISTICS	SYMBOL	MUR160	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O$ DC	$V_F$	1.25	V
MAXIMUM REVERSE CURRENT AT $25^{\circ}C$	$I_R$	5	mA
MAXIMUM REVERSE CURRENT AT $100^{\circ}C$	$I_R$	250	mA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	$T_{RR}$	50	nS

NOTE:

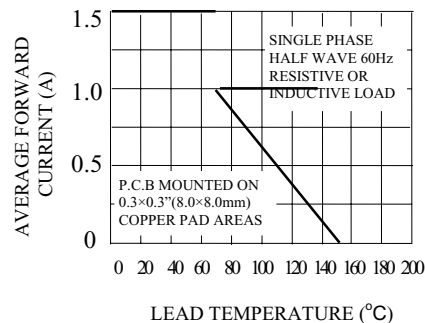
1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1(mm) COPPER PLATE AT LEAD LENGTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $IRR=0.25A$

## Rating and Characteristic Curves (MUR160)

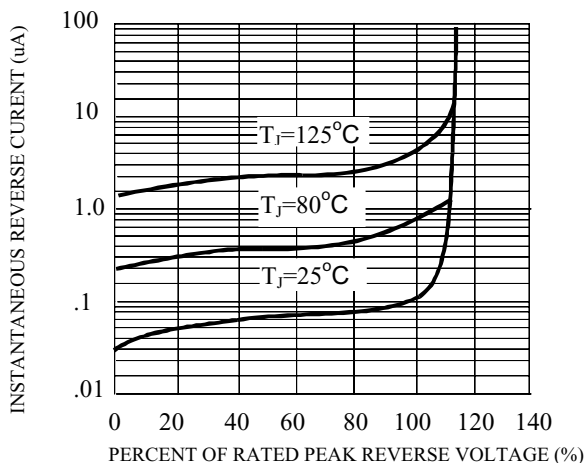
**FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



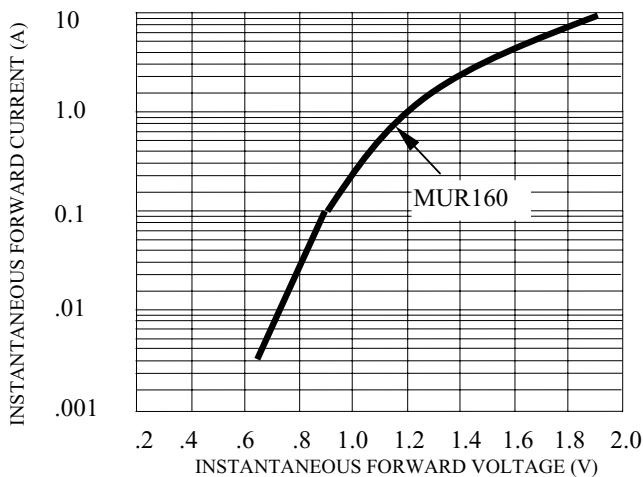
**FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE**



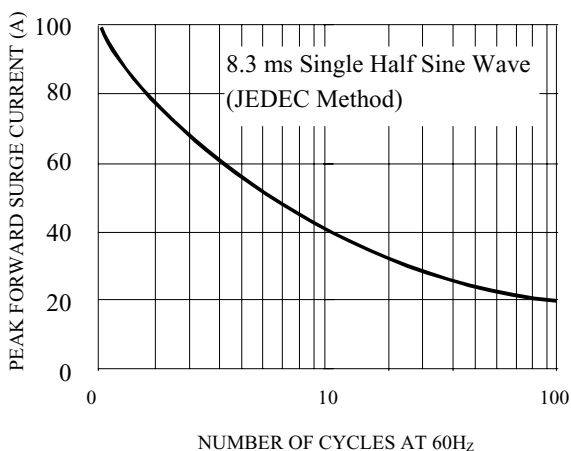
**FIG. 3-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 6-TYPICAL JUNCTION CAPACITANCE**

