

MUR160

Voltage: 600 Volts

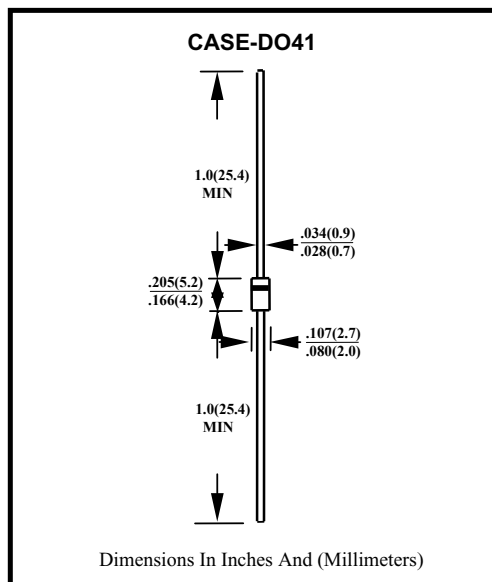
Current: 1.0 A

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

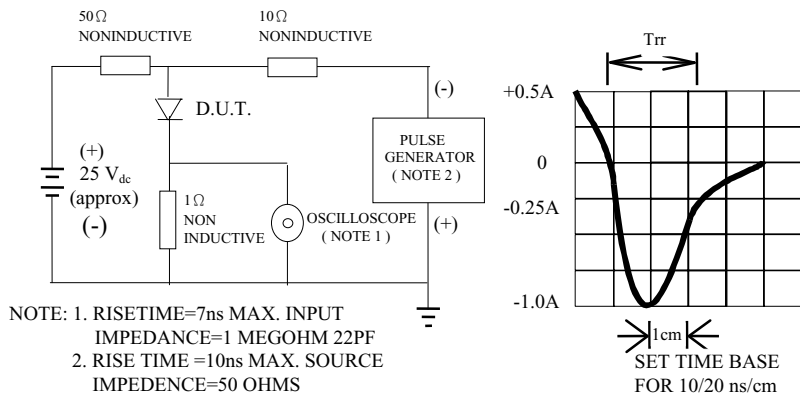


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

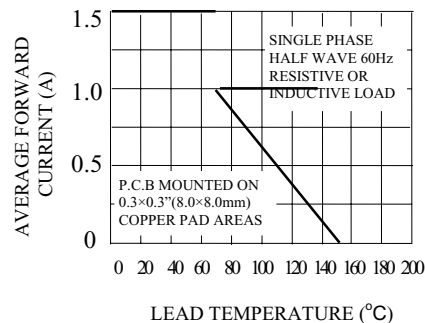


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

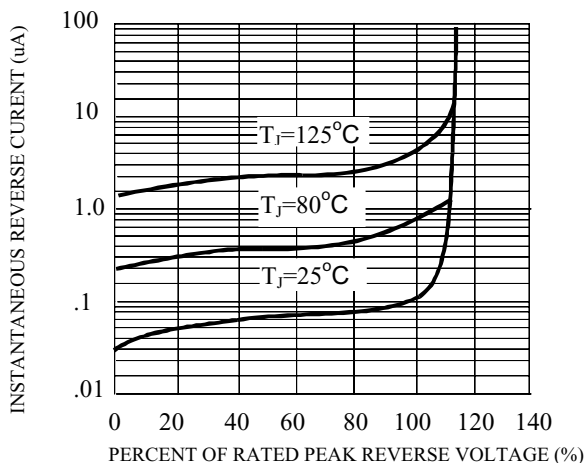


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

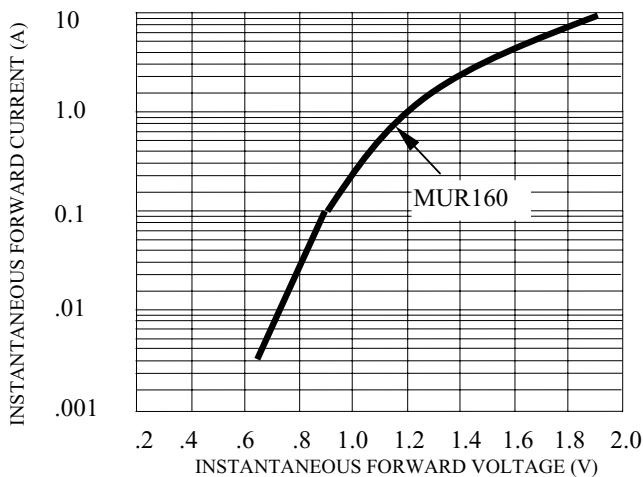


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

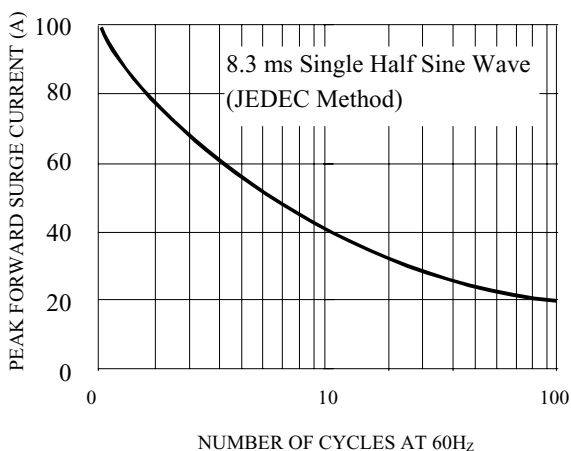


FIG. 6-TYPICAL JUNCTION CAPACITANCE

