

SUPER FAST RECTIFIERS

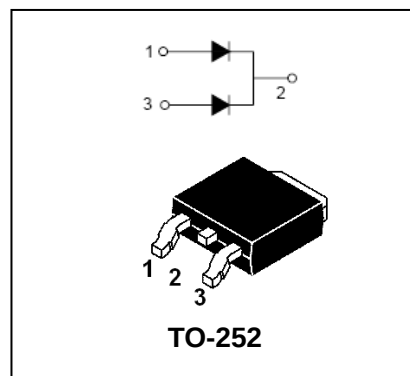
MUR1020DC-MUR1060DC

FEATURES

- Low cost.
- Low leakage.
- Low forward voltage drop.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and similar solvents.
- The plastic material carries U/L recognition 94V-0.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR 1020DC	MUR 1030DC	MUR 1040DC	MUR 1060DC	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	200	300	400	600	V
V_{RMS}	RMS Voltage	140	210	280	420	V
V_{DC}	DC Blocking Voltage	200	300	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	10				A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	60				A
T_J T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_A=25^\circ\text{C}$ unless otherwise specified

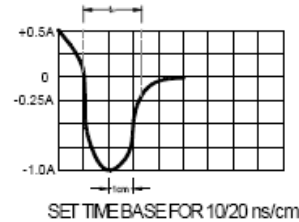
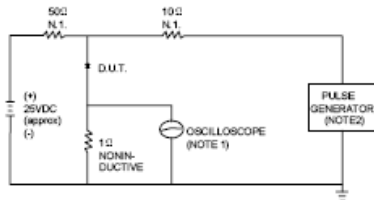
Parameter	Symbol	Test conditions	MAX				UNIT
			MUR 1020DC	MUR 1030DC	MUR 1040DC	MUR 1060DC	
Forward Voltage	V_F	$I_F=5\text{A}$	0.975	1.3	1.3	1.5	V
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=150^\circ\text{C}$	5.0 250	10 500			μA
Reverse Recover Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	25	50			ns

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

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



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = $1\text{M}\Omega$, 22pF.
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50Ω .

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC

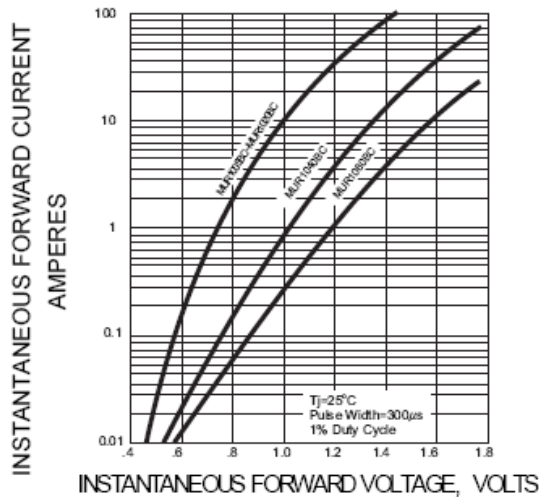


FIG.3 -- PEAK FORWARD SURGE CURRENT

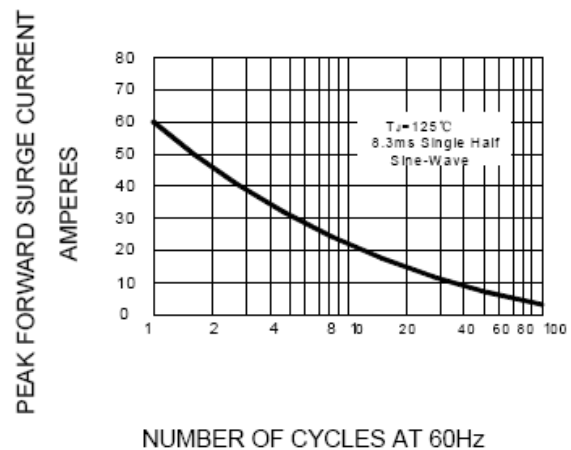
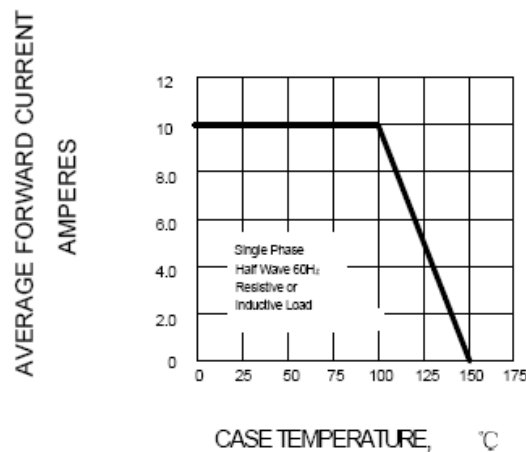


FIG.4 FORWARD DERATING CURVE





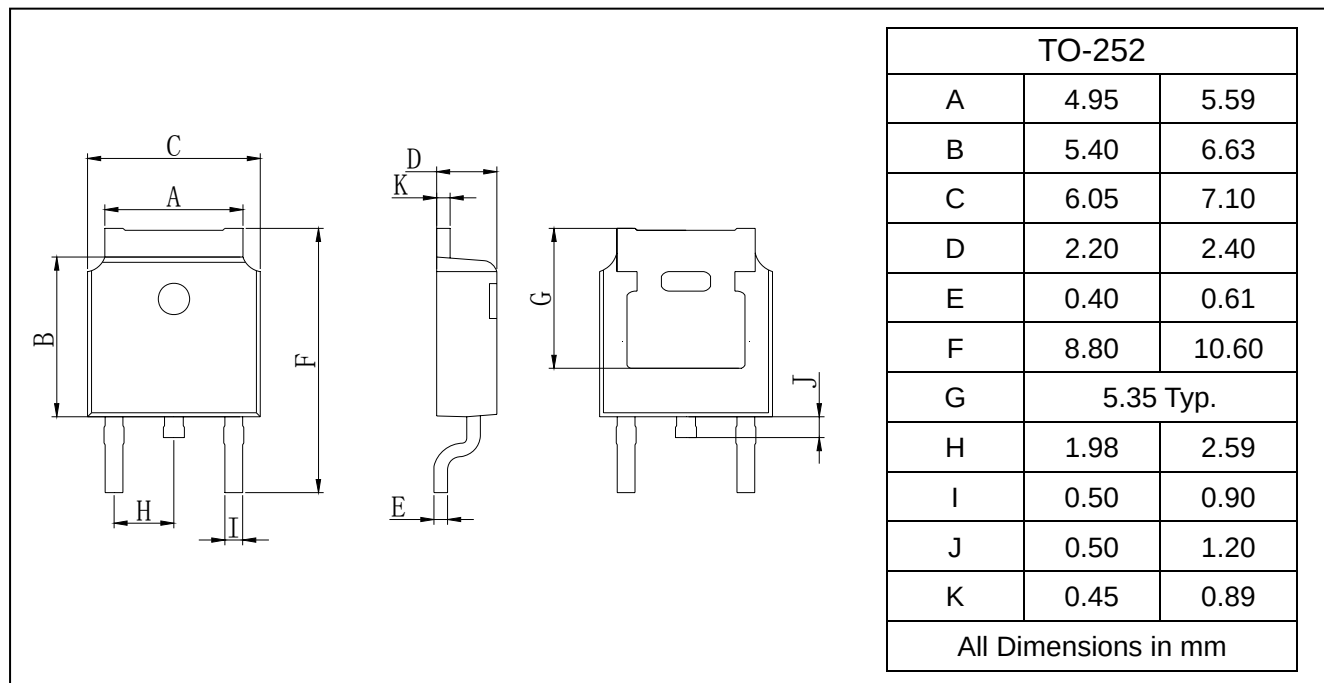
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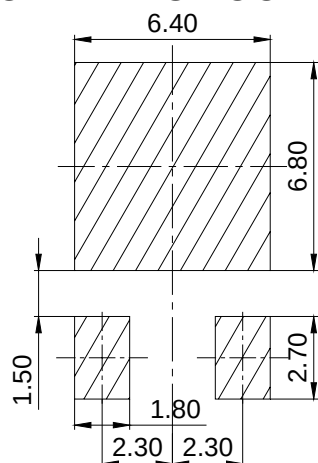
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
MUR1020DC-MUR1060DC	TO-252	80PCS/Tube
		2500PCS/Tape&Reel