

# MUR210 thru MUR280

Ultrafast Recovery Rectifiers  
 Reverse Voltage 50V-1000V Forward Current 2.0 A

## Features

- Glass passivated junction chip
- High current capability
- Low forward voltage drop
- High reliability
- High surge current capability



Package: DO-204AC (DO-15)

## Mechanical Data

- Case: Molded plastic DO-204AC(DO-15)
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:  
 250°C/10 seconds .375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Mounting position: Any
- Weight: 0.014 ounce, 0.395 gram



## Maximum Ratings and Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	MUR 210	MUR 220	MUR 230	MUR 240	MUR 250	MUR 260	MUR 270	MUR 280	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @T <sub>A</sub> =55°C	I <sub>F(AV)</sub>	2.0								A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load, JEDEC method)	I <sub>FSM</sub>	60.0								A
Maximum Instantaneous Forward Voltage @ 2.0A	V <sub>F</sub>	1.0			1.3		1.7			V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at rated DC Blocking Voltage @ T <sub>A</sub> =125°C	I <sub>R</sub>					5.0		150		μA μA
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>	50				75				ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	50				30				pF
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

- Notes:**
1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A
  2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

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

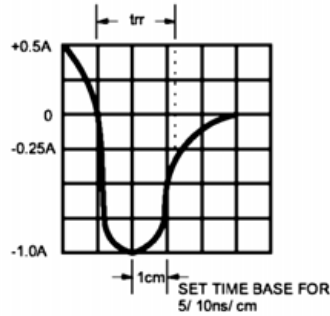
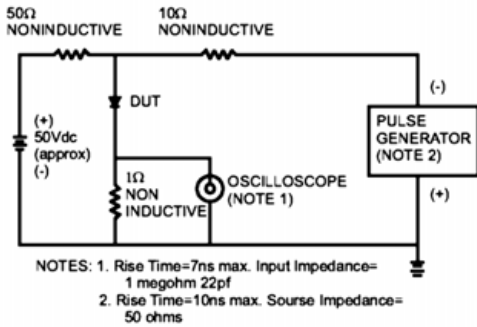


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

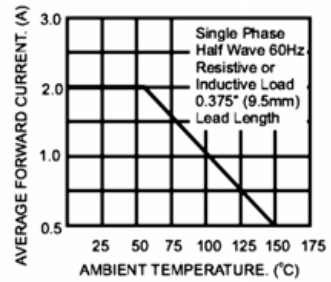


FIG.3- TYPICAL REVERSE CHARACTERISTICS

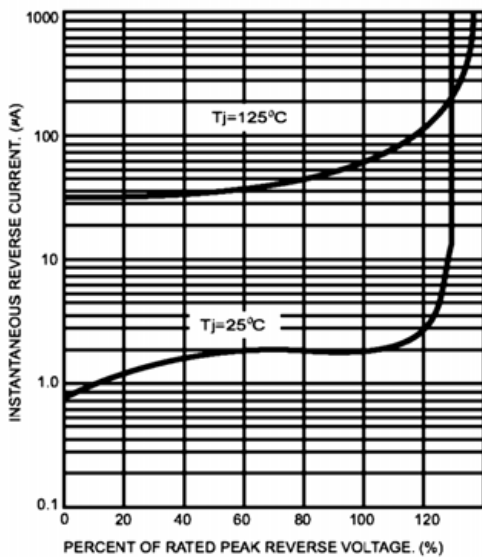


FIG.4- TYPICAL FORWARD CHARACTERISTICS

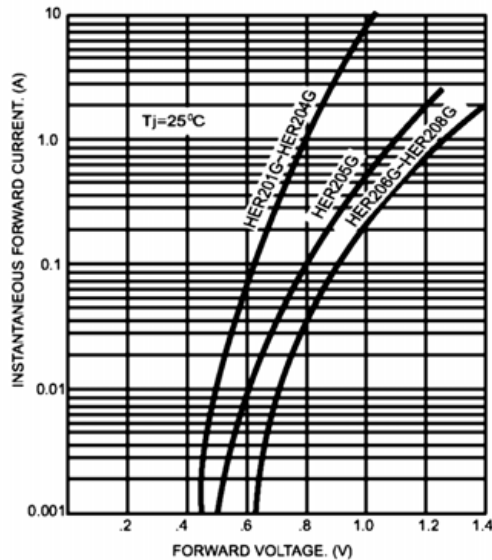


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

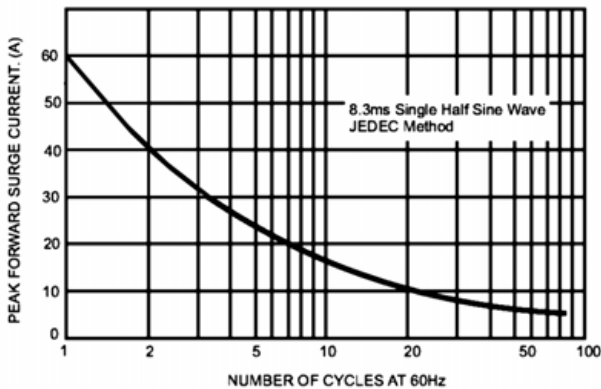
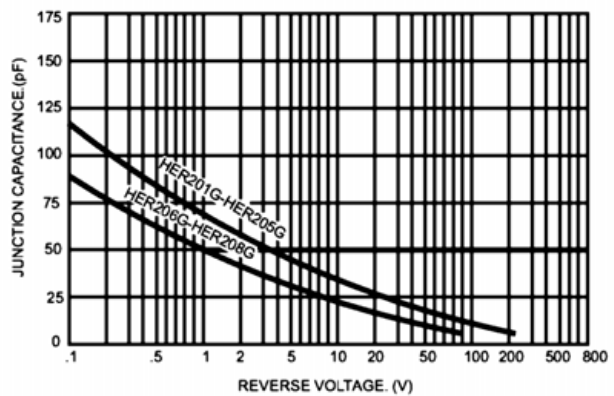


FIG.6- TYPICAL JUNCTION CAPACITANCE



## Package Outline Dimensions

in inches (millimeters)

DO-204AC (DO-15)

