GOOD-ARK
SEMICONDUCTOR

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)

RoHS COMPLIANT

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_A = 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_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @T_A =55°C	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load, JEDEC method)	I_{FSM}	60.0								A
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.0				1.3	1.7			V
Maximum DC Reverse Current @ T_A =25°C at rated DC Blocking Voltage @ T_A =125°C	I_R	5.0 150								μA μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50					75			ns
Typical Junction Capacitance (Note 2)	C_J	50					30			pF
Operating Junction Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

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Ratings and Characteristics Curves (T_A = 25°C unless otherwise noted)

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

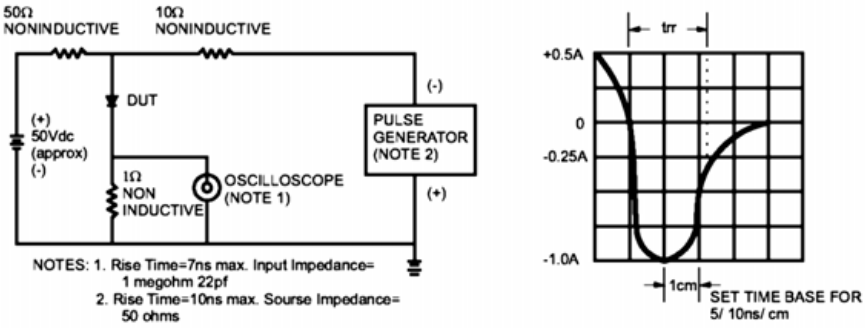


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

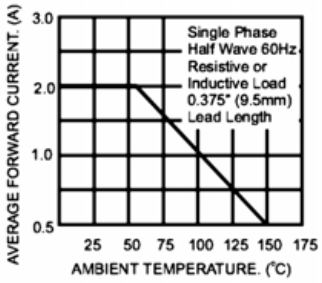


FIG.3- TYPICAL REVERSE CHARACTERISTICS

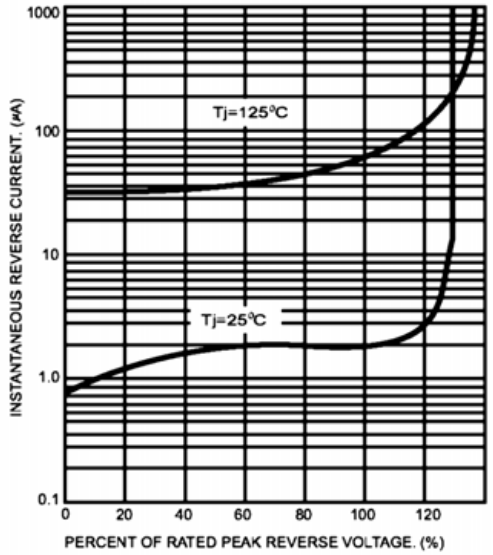


FIG.4- TYPICAL FORWARD CHARACTERISTICS

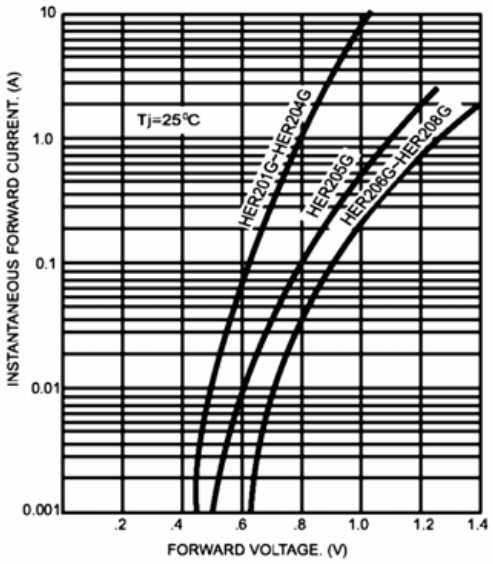


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

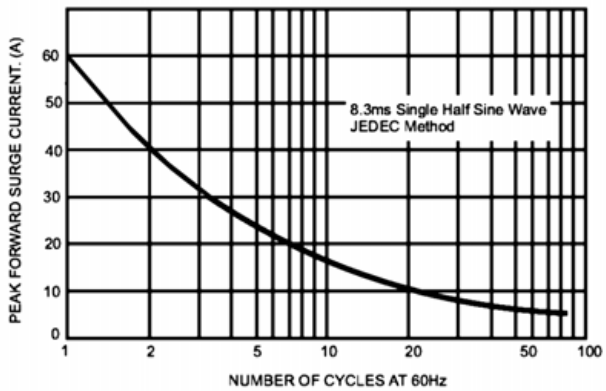
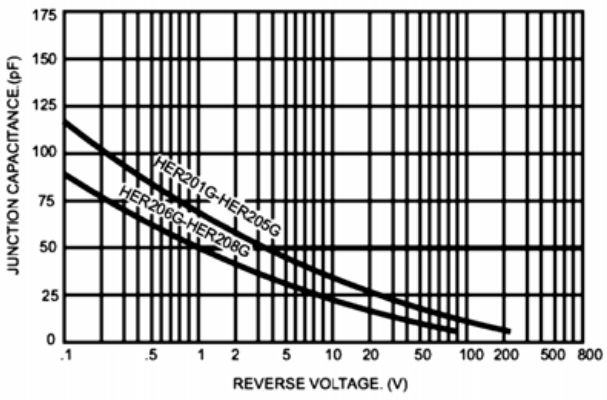


FIG.6- TYPICAL JUNCTION CAPACITANCE



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Package Outline Dimensions

in inches (millimeters)

DO-204AC (DO-15)