

MUR405 THRU MUR4100



4.0 AMP HIGH EFFICIENCY RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * High speed switching

MECHANICAL DATA

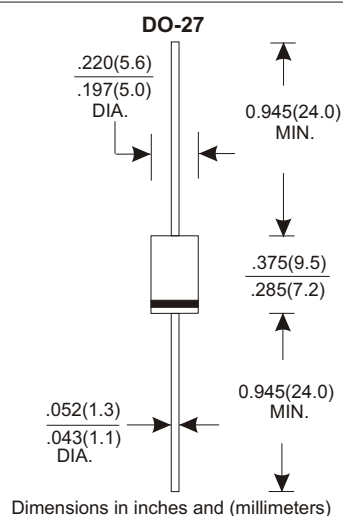
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.10 grams
- * Both normal and Pb free product are available:
- * Normal: 80~95%Sn, 5~20%Pb
- * Pb free: 99 Sn above can meet Rohs environment substance directive request

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

4.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	MUR405	MUR410	MUR420	MUR430	MUR440	MUR460	MUR480	MUR4100	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current										
.375"(9.5mm) Lead Length at Ta=50°C									4.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)									200	A
Maximum Instantaneous Forward Voltage at 3.0A	1.0	1.3			1.70				V	
Maximum DC Reverse Current Ta=25°C									5	uA
at Rated DC Blocking Voltage Ta=100°C									200	uA
Maximum Reverse Recovery Time (Note 1)	50					70			nS	
Typical Junction Capacitance (Note 2)									75	pF
Operating and Storage Temperature Range Tj, TSTG									-65 — +150	°C

NOTES:

- Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
- Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (MUR405 THRU MUR4100)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

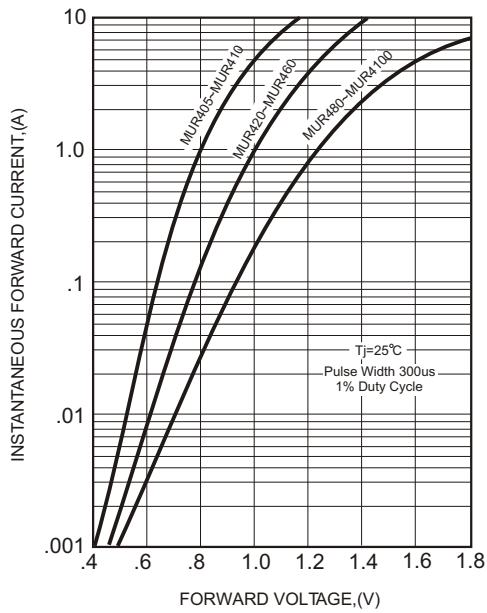


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

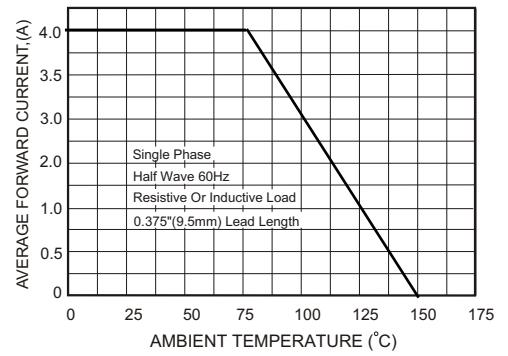


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

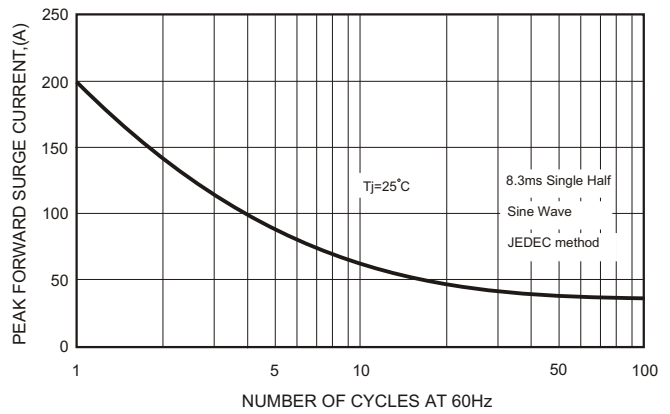
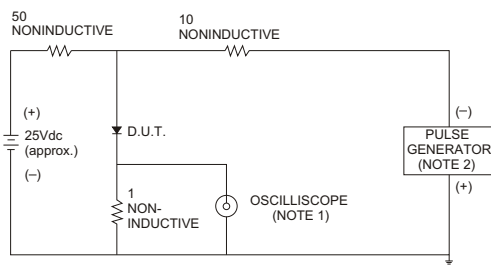


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

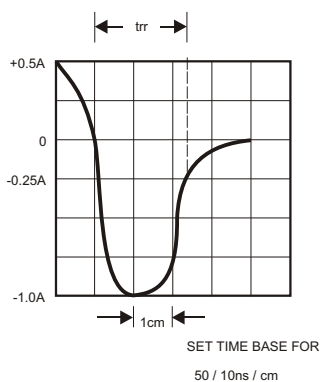


FIG.5-TYPICAL JUNCTION CAPACITANCE

