

# MUR405-MUR4100

Super Fast Rectifier



**VOLTAGE RANGE: 50-1000V**

**CURRENT: 4.0A**

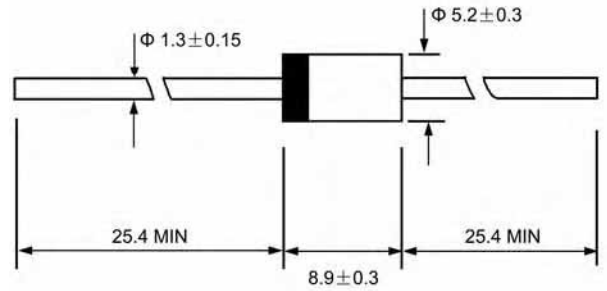
## Features

- ◇ 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

## Mechanical Data

- ◇ Case: JEDEC DO-27 molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces, 1.15 grams
- ◇ Mounting position: Any

## DO-27



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate by 20%.

Type Number	Symbol	MUR	MUR	MUR	MUR	MUR	MUR	MUR	MUR	UNI TS
		405	410	415	420	440	460	480	4100	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	400	600	800	1000	V
Maximum average forward rectified Current 9.5mm lead length @ $T_A=75^\circ C$	$I_{F(AV)}$	4.0								A
Peak forward surge current: 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	125								A
Maximum instantaneous Forward Voltage @4.0A	$V_F$	0.89			1.28		1.75			V
Maximum Reverse Current at rated DC Blocking Voltage	$I_R$	5								$\mu A$
		150								$\mu A$
Maximum reverse recovery time (Note1)	$T_{rr}$	25			50		70			ns
Typical junction capacitance (Note2)	$C_j$	70								PF
Typical thermal resistance (Note3)	$R_{\theta JA}$	20								$^\circ C/W$
Operating junction temperature range	$T_J$	-65 to +175								$^\circ C$
Storage temperature range	$T_{STG}$	-65 to +175								$^\circ C$

Note: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

FIG.1: Io-Ta Curve

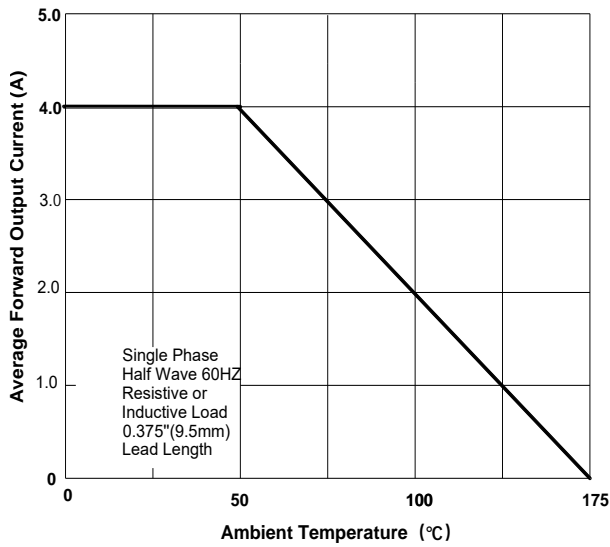


FIG.2: Forward Surge Current Capability

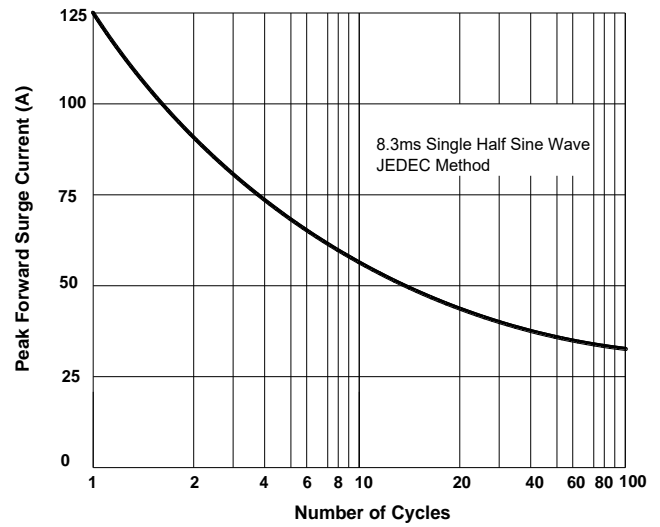


FIG.3: Forward Voltage

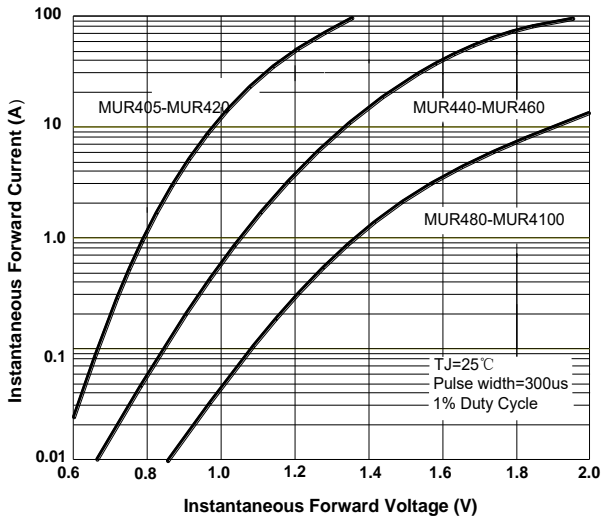


FIG.4: Typical Reverse Characteristics

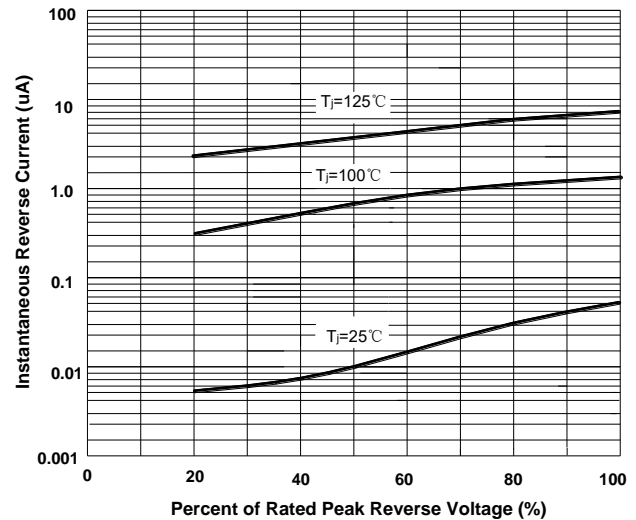
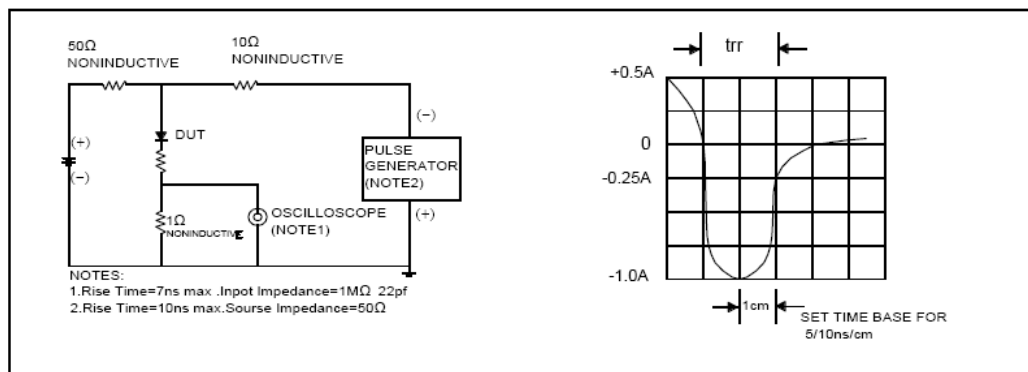


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-27	5000/AMMO	50000	42X28X31	14.00	12.00