

MUR405 THRU MUR4100

DO-27 Plastic-Encapsulate Diodes

Super Fast Recovery Rectifier Diode

Features

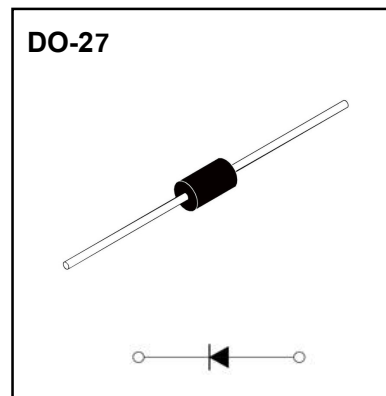
- I_O 4.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- MUR4XX
XX:From 05 to 100



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	MUR							
				405	410	420	430	440	460	480	4100
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	300	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	210	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load $T_a=50^{\circ}C$	4.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave,1 cycle, $T_a=25^{\circ}C$	125							
Junction Temperature	T_J	$^{\circ}C$		-55~+150							
Storage Temperature	T_{STG}	$^{\circ}C$		- 55~+150							

Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		MUR						
					405	410	420	430	440	460	480
Peak Forward Voltage	V _{FM}	V	I _{FM} =4.0A		0.95		1.28			1.7	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5						
	T _a =125℃			50							
Reverse Recovery time	t _{tr}	ns	I _F =0.5A I _R =1A I _{RR} =0.25A		35		50			75	
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		20						
	R _{θJ-L}		Between junction and lead		10						

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

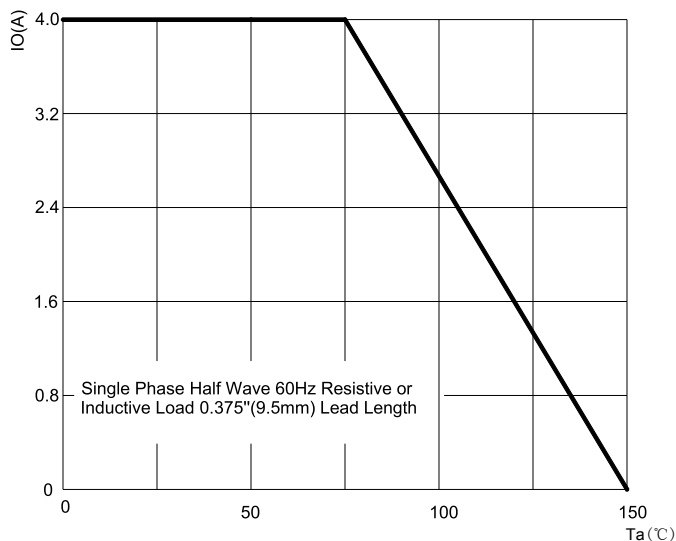


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

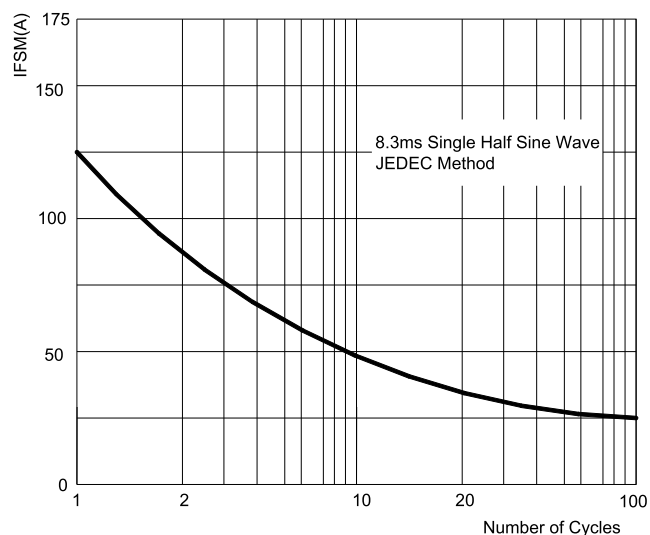


FIG.3: TYPICAL FORWARD CHARACTERISTICS

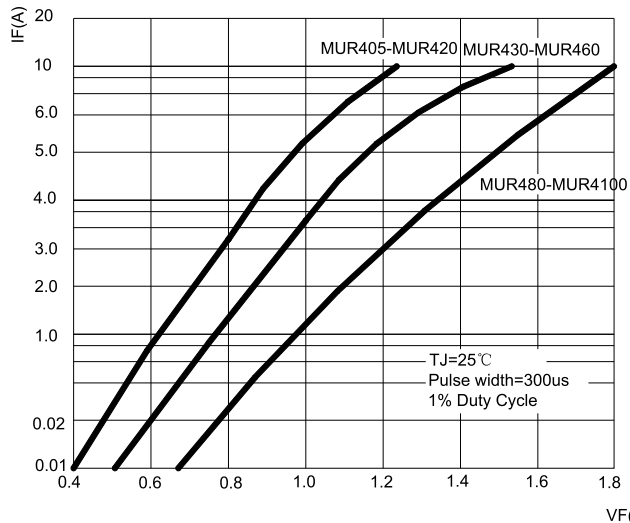


FIG.4: TYPICAL REVERSE CHARACTERISTICS

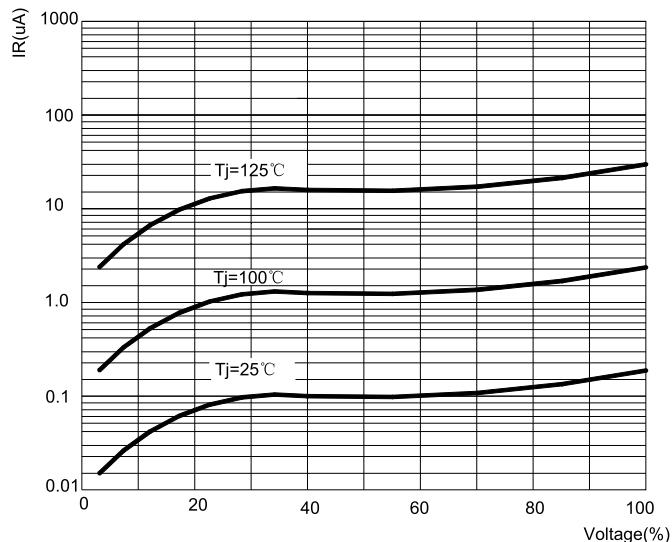
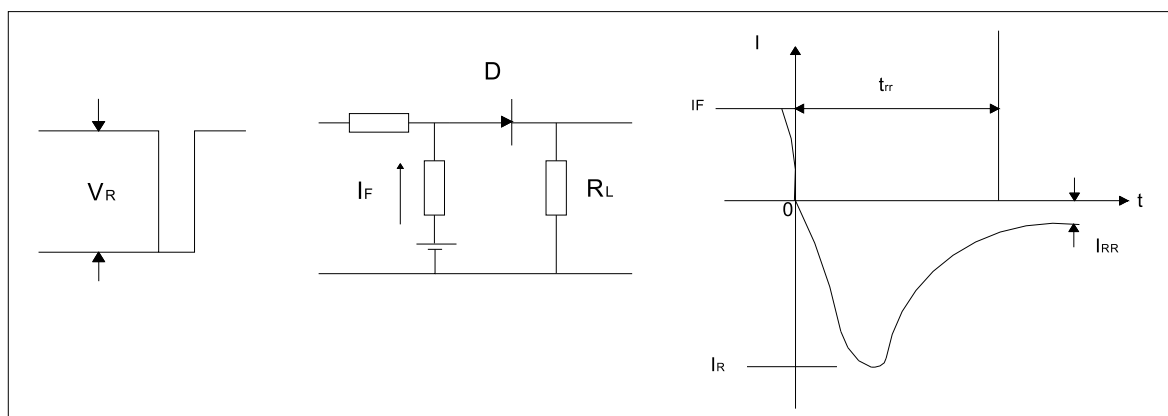
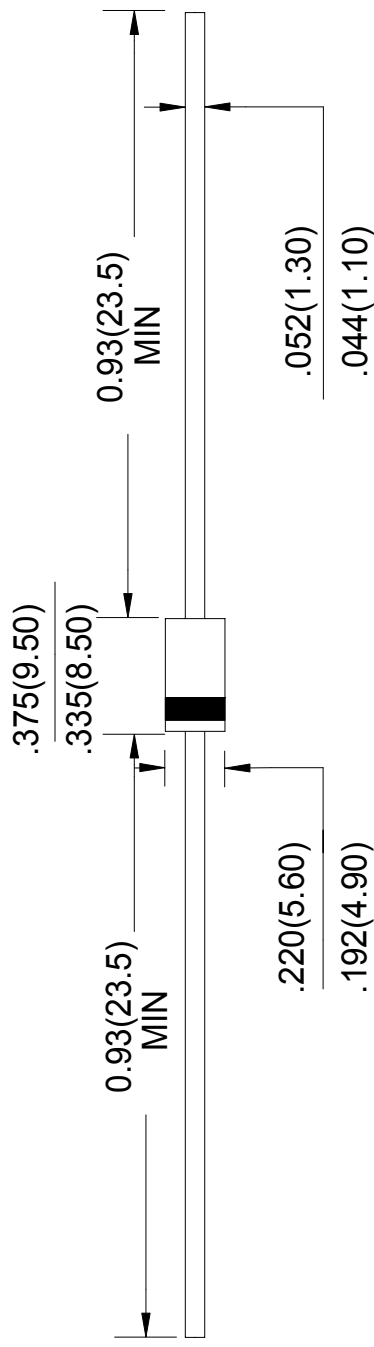


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





Unit: in inches (millimeters)

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