

DO-27 Plastic-Encapsulate Diodes

MUR405 THRU MUR4100

Super Fast Recovery Rectifier Diodes

Features

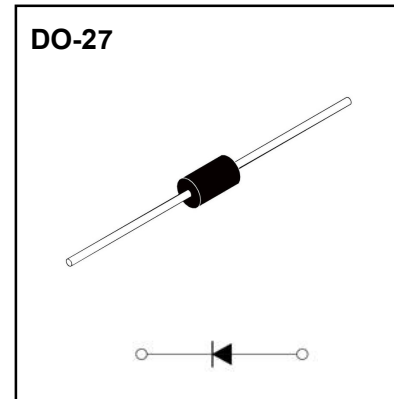
- $I_{F(AV)}$ 4.0A
- V_{RRM} 50V~1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- MUR4XX
XX: From 05 To 100



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	MUR 405	MUR 410	MUR 420	MUR 430	MUR 440	MUR 460	MUR 480	MUR 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
Maximum DC Blocking Voltage	V_{DC}	V		50	100	200	300	400	600	800	1000
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=55^\circ C$	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 ($T=25^\circ C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	MUR 405	MUR 410	MUR 420	MUR 430	MUR 440	MUR 460	MUR 480	MUR 4100
Maximum Peak Forward Voltage	V_{FM}	V	$I_{FM}=4.0A$	0.95			1.30			1.7	
Maximum Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_J=25^\circ C$							
	I_{RRM2}			$T_J=125^\circ C$							
Reverse Recovery time	t_{rr}	ns	$I_F=0.5A, I_R=1.0A, I_{tr}=0.25A$	35			50			75	
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	80							
Typical Thermal Resistance	$R_{\theta J-A}$	$^\circ C/W$	Between junction and ambient	28							
	$R_{\theta J-L}$		Between junction and lead	15							

Notes:

Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

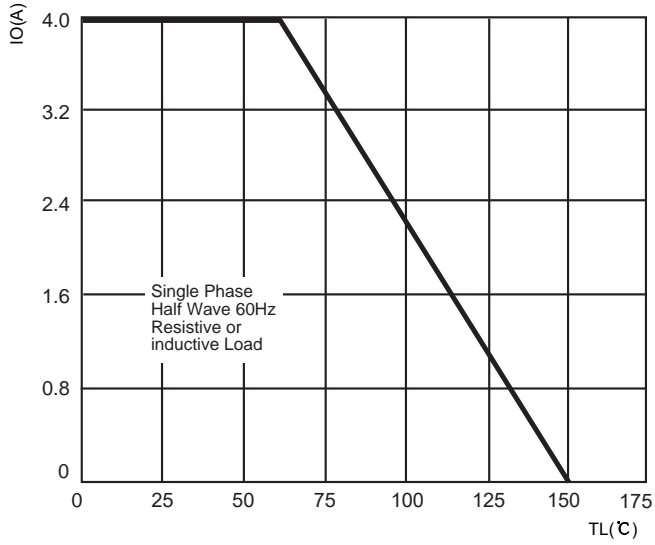


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

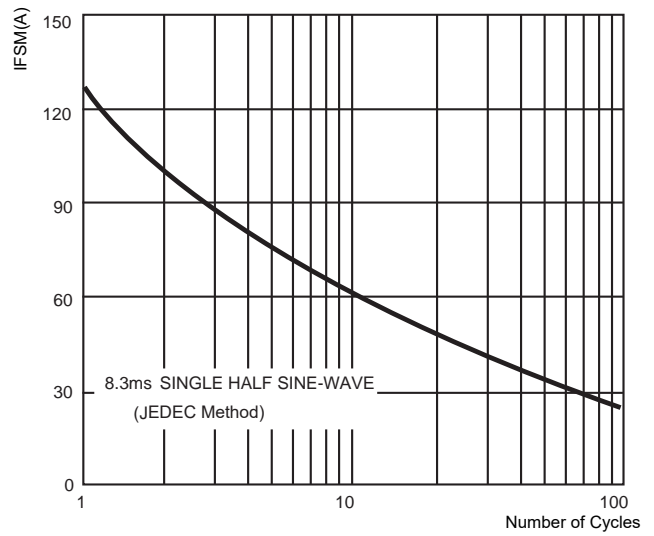


FIG.3: TYPICAL FORWARD CHARACTERISTICS

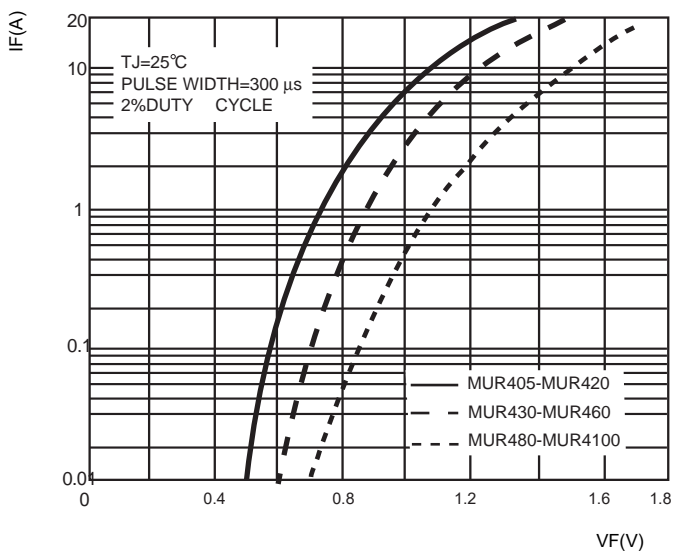
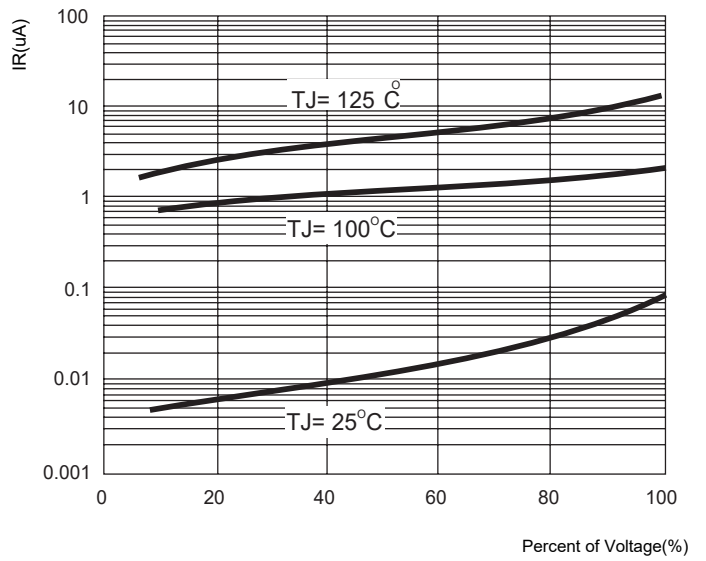
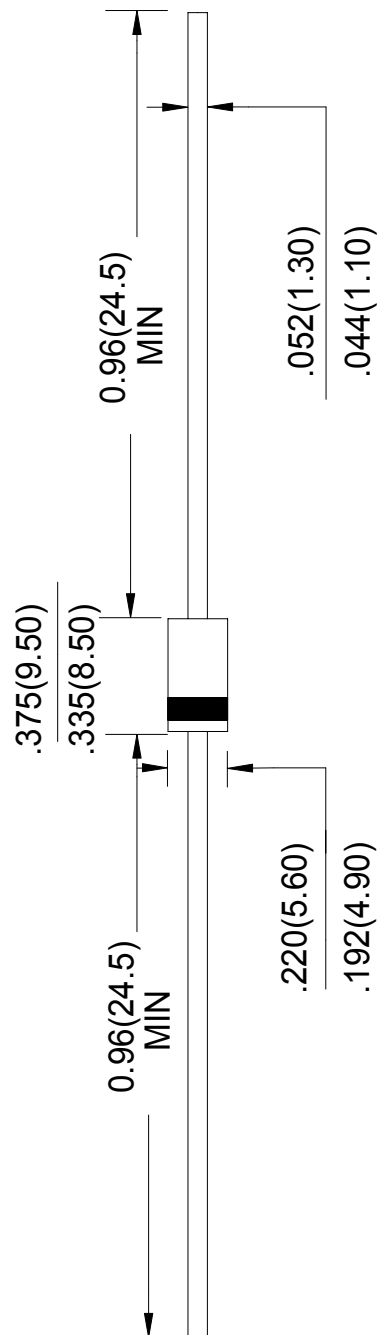


FIG.4: TYPICAL REVERSE CHARACTERISTICS



DO- 27 Package Outline Dimensions



Unit: in inches (millimeters)

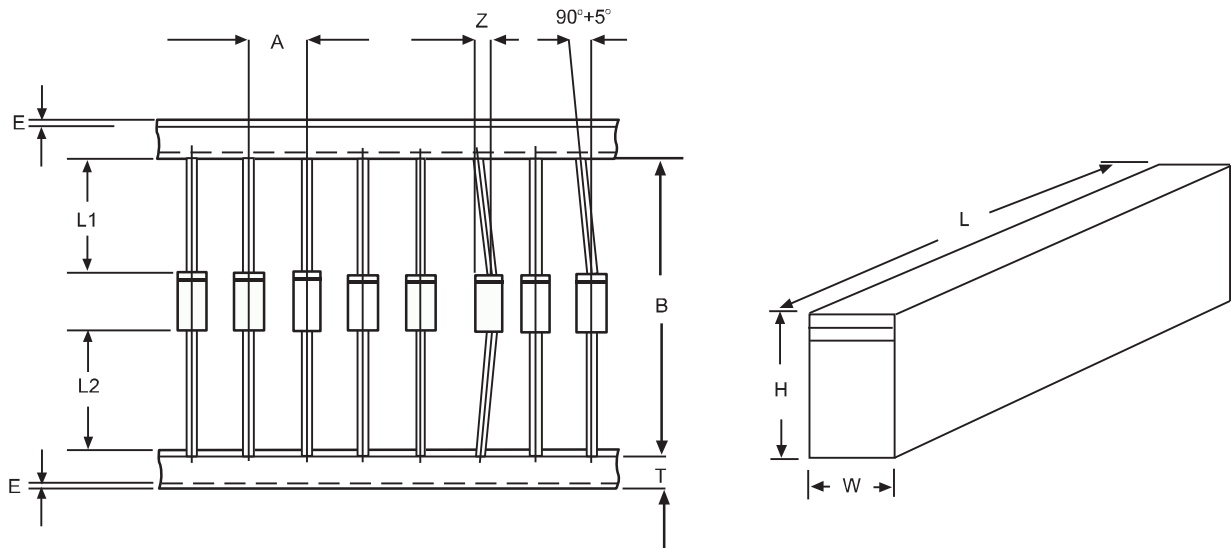
NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

Ammo Box Packaging Specifications For Axial Lead Rectifiers

Axial lead devices are packed in accordance with EIA standard RS-296-D and specifications given below

COMPONENT OUTLINE	COMPONENT PITCH A	INNER TAPE PITCH B	CUMULATIVE PITCH TOLERANCE
	$\pm 0.5\text{mm}(.020'')$	$+0.5\text{mm}(.020'')$	
R-1	5.0mm	26.0mm	2.0mm/20pitch
R-1	5.0mm	52.4mm	2.0mm/10pitch
A-405	5.0mm	26.0mm	2.0mm/20pitch
A-405	5.0mm	52.4mm	2.0mm/10pitch
DO-34/DO-35	5.0mm	26.0mm	2.0mm/20pitch
DO-34/DO-35	5.0mm	52.4mm	2.0mm/10pitch
DO-41	5.0mm	26.0mm	2.0mm/20pitch
DO-41	5.0mm	52.4mm	2.0mm/10pitch
DO-15	5.0mm	52.4mm	2.0mm/10pitch
DO-27	10.0mm	52.4mm	2.0mm/10pitch
R-6	10.0mm	52.4mm	2.0mm/10pitch



ITEM	SYMBOL	SPECIFICATIONS(mm)	SPECIFICATIONS(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0 ± 0.4	0.236 ± 0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	IL1-L2I	1.0max	0.040max
Box length	L	255.0 ± 5.0	10.04 ± 0.197
Box width	W	78.0 ± 5.0	3.07 ± 0.197
Box height	H	150.0 ± 5.0	5.91 ± 0.197

NOTE: Each component lead shall be sandwiched between tapes for A minimum of 3.2mm(0.126'')