

DO-27 Plastic-Encapsulate Diodes

Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

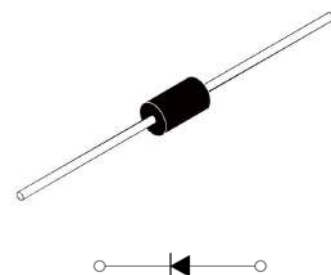
- Rectifier

Marking

- SR5XX

X : From 20 To 200

DO-27



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	SR5						
				20	40	60	80	100	150	200
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	40	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V		14	32	42	56	70	105	140
Maximum DC Blocking Voltage	V_{DC}	V		20	40	60	80	100	150	200
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, TL(Fig.1)	5.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a = 25^\circ\text{C}$	150						
Junction Temperature	T_J	$^\circ\text{C}$		-55 ~ +150						
Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

Electrical Characteristics (T=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SR5						
					20	40	60	80	100	150	200
Maximum Peak Forward Voltage	V _{FM}	V	I _{FM} =5.0A		0.52		0.65	0.85			
Maximum Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.1						
	T _a =125℃			10							
Typical junction capacitance	C _J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		500		400				
Typical Thermal Resistance	R _{θJ-A}	℃ /W	Between junction and ambient		25						
	R _{θJ-L}		Between junction and lead		5						

Notes:

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

Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

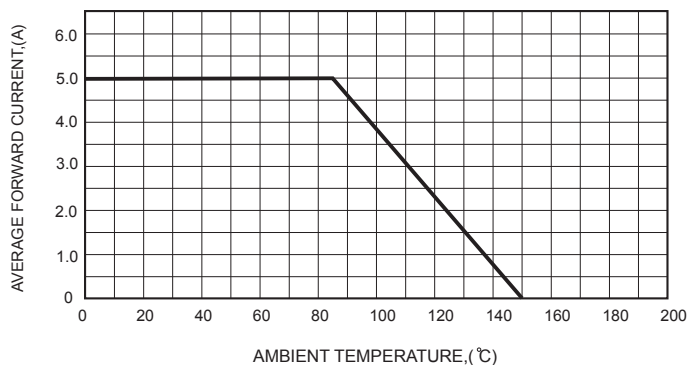


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

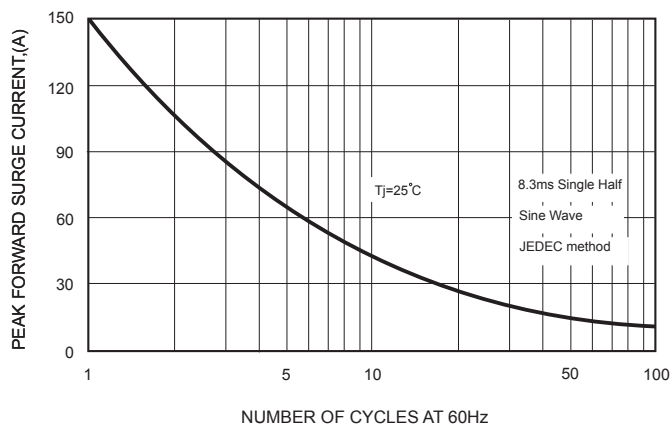


FIG.4-TYPICAL JUNCTION CAPACITANCE

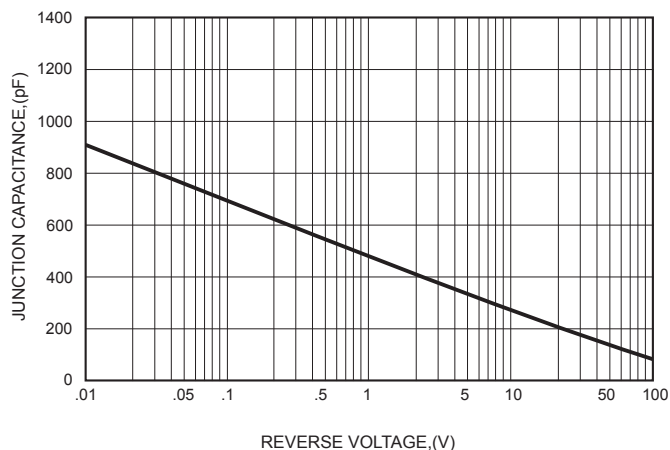


FIG.2-TYPICAL FORWARD CHARACTERISTICS

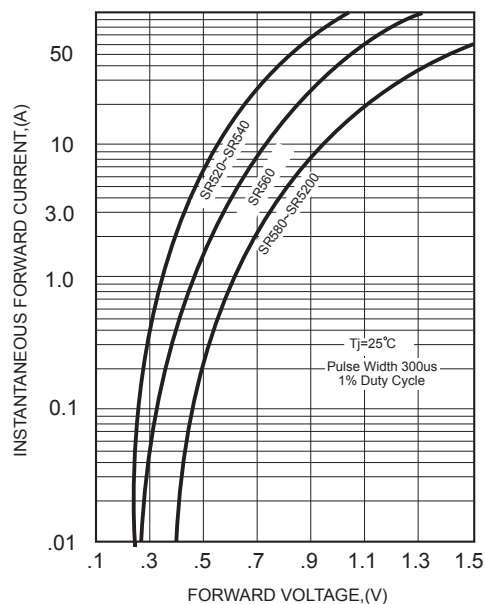
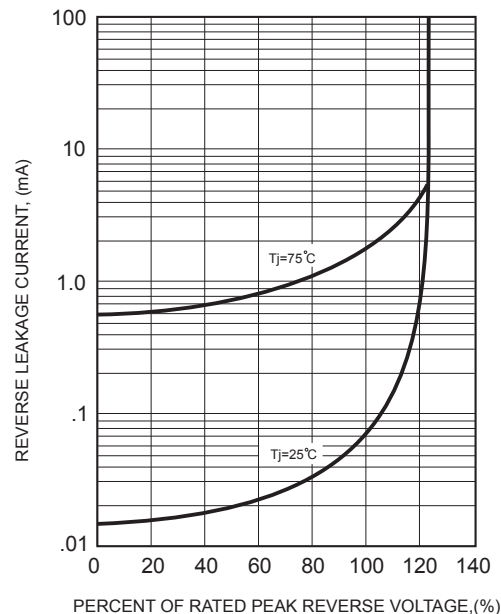
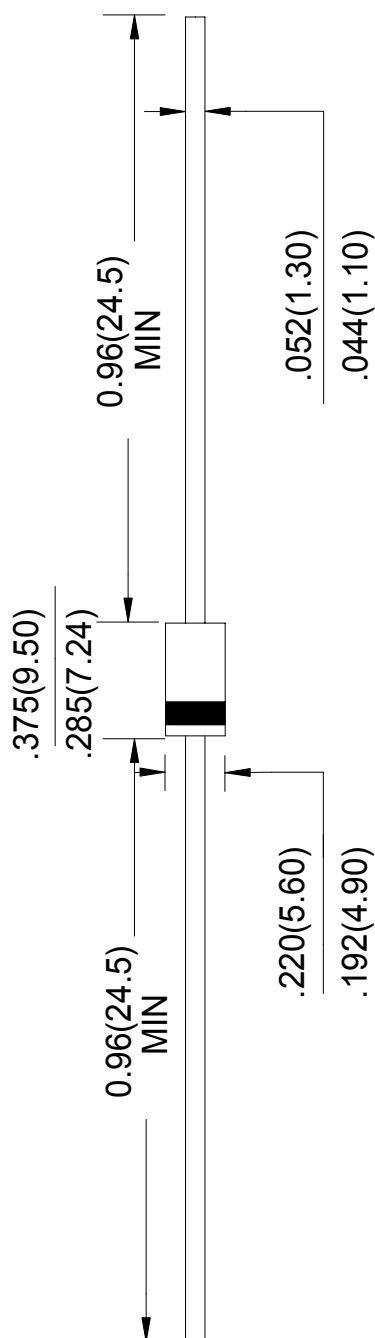


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



DO-27 Package Outline Dimensions

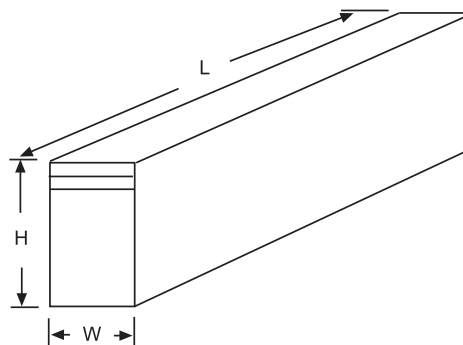
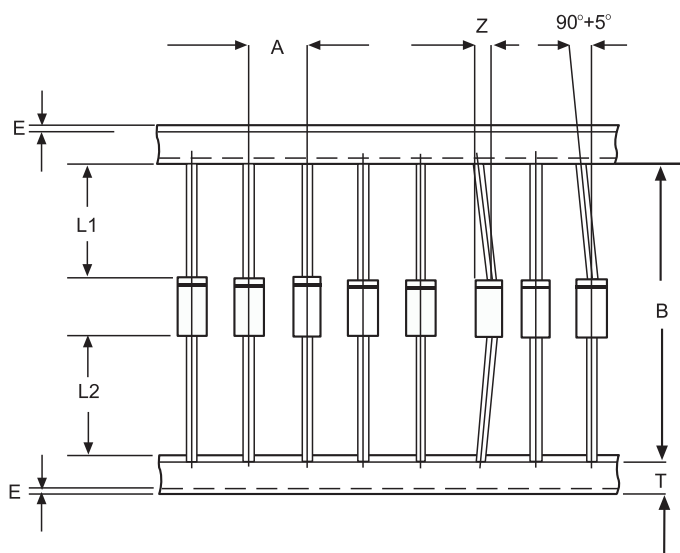


Unit: in inches (millimeters)

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	$ L1-L2 $	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'')