

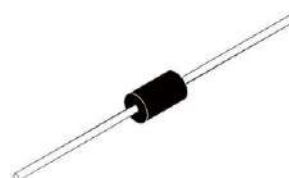
## DO-27 Plastic-Encapsulate Diodes

### Schottky Rectifier Diode

#### Features

- $I_{F(AV)}$  15
- $V_{RRM}$  20V~100V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

DO-27



#### Applications

- Rectifier

#### Marking

- SR15XXL  
 XX:From 20 To 100

#### Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KSR15						
				20L	30L	40L	50L	60L	80L	100L
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		20	30	40	50	60	80	100
Maximum RMS Voltage	$V_{RMS}$	V		14	21	28	35	42	56	70
Maximum DC Blocking Voltage	$V_{DC}$	V		20	30	40	50	60	80	100
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_a=100^{\circ}C$	15.0						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	150						
Junction Temperature	$T_J$	$^{\circ}C$		-55 ~ +125			-55 ~ +150			
Storage Temperature	$T_{STG}$	$^{\circ}C$		-55 ~ +150						

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

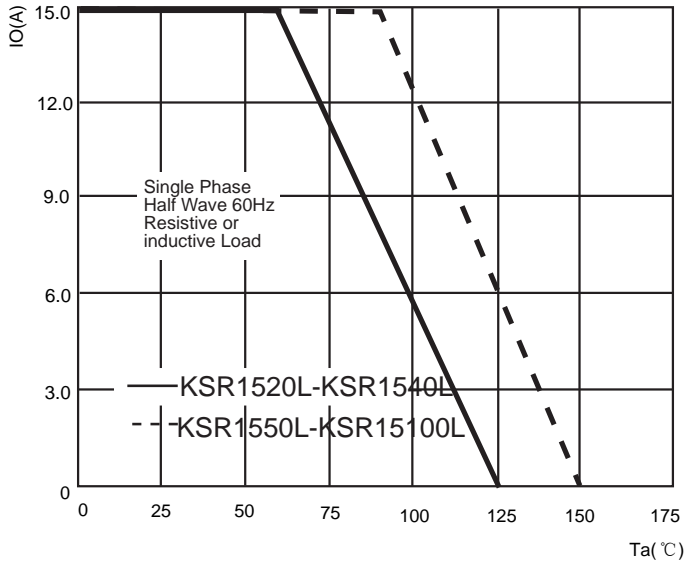
Item	Symbol	Unit	Test Condition		KSR15						
					20L	30L	40L	50L	60L	80L	100L
Maximum Peak Forward Voltage	$V_F$	V	$I_F=15.0A$	$T_a=25^{\circ}C$	0.45			0.50	0.70		
Maximum Peak Reverse Current	$I_{RRM1}$	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	0.3				0.02		
	$I_{RRM2}$			$T_a=125^{\circ}C$	20				10		
Typical junction capacitance	$C_J$	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		500			400			
Typical Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient		25						
	$R_{\theta J-L}$		Between junction and lead		8						

#### Notes:

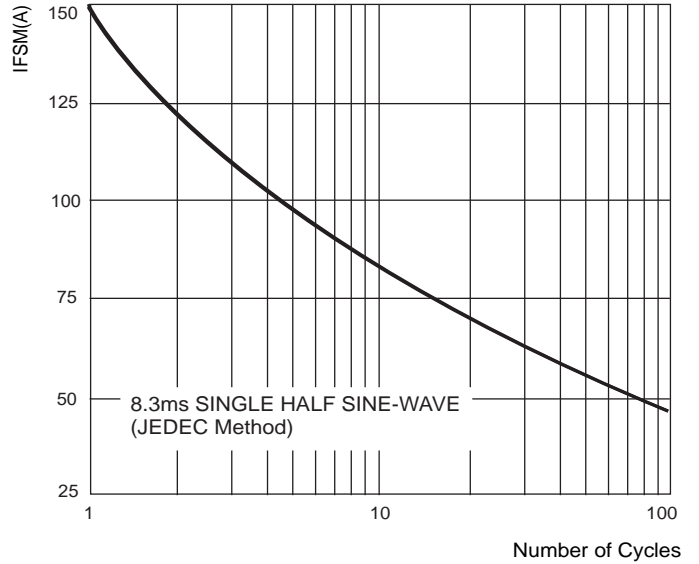
Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

**Typical Characteristics**

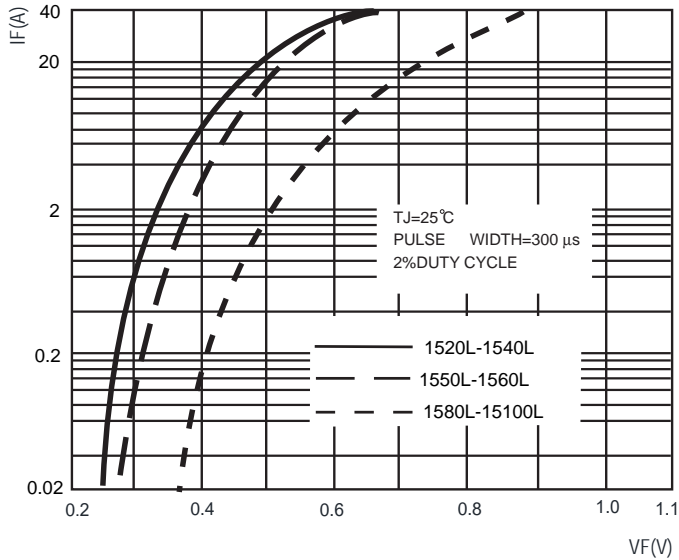
**FIG.1: FORWARD CURRENT DERATING CURVE**



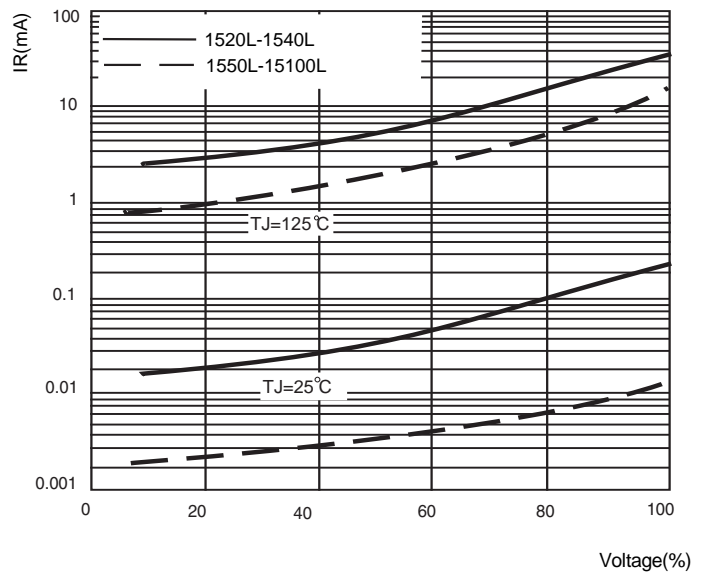
**FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



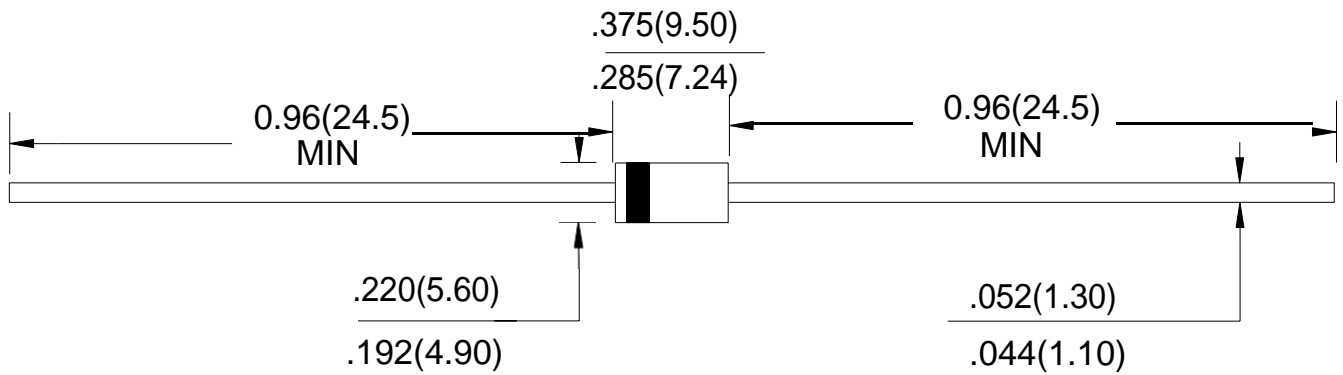
**FIG.3: TYPICAL FORWARD CHARACTERISTICS**



**FIG.4: TYPICAL REVERSE CHARACTERISTICS**



Package Outline Dimensions

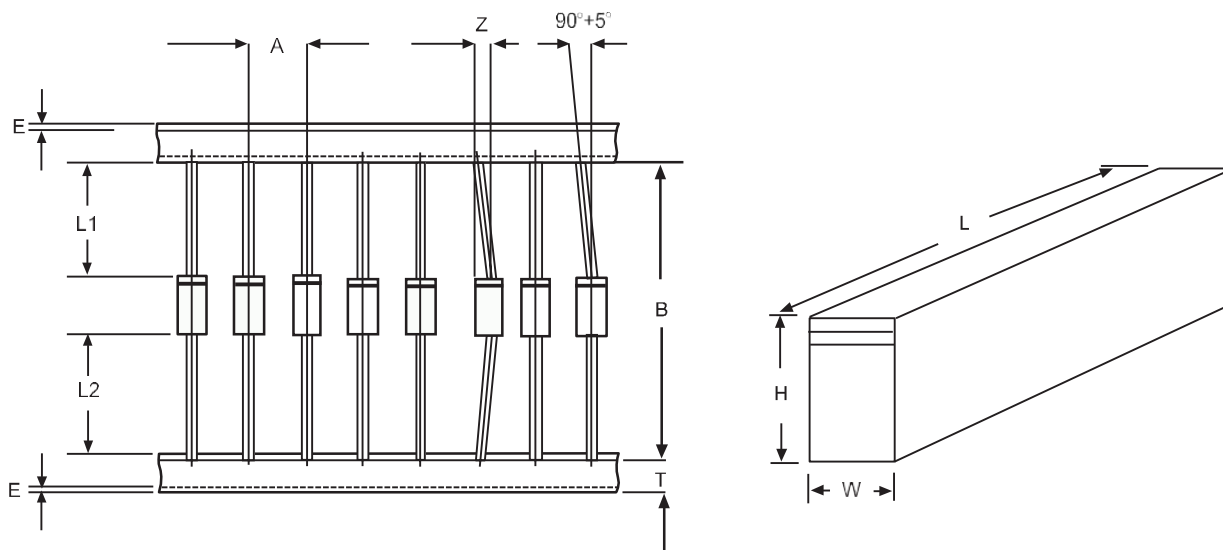


Unit: in inches (millimeters)

### 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	
A-405	5.0mm	26.0mm	2.0mm/20pitch
A-405	5.0mm	52.4mm	
DO-34/DO-35	5.0mm	26.0mm	2.0mm/20pitch
DO-34/DO-35	5.0mm	52.4mm	
DO-41	5.0mm	26.0mm	2.0mm/20pitch
DO-41	5.0mm	52.4mm	
DO-15	5.0mm	52.4mm	2.0mm/10pitch
DO-27		52.4mm	
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+0.01
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'')