

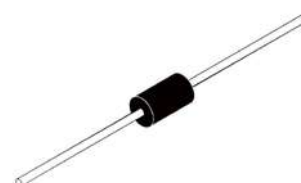
DO-27 Plastic-Encapsulate Diodes

Schottky Rectifier Diode

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 20V~100V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

DO-27



Applications

- Rectifier

Marking

- SR5XXL
 XX:From 20 To 100

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SR5 20L	SR5 30L	SR5 40L	SR5 50L	SR5 60L	SR5 80L	SR5 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 , $T_a=100^{\circ}C$	5.0						
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		SR5 20L	SR5 30L	SR5 40L	SR5 50L	SR5 60L	SR5 80L	SR5 100L
Maximum Peak Forward Voltage	V_F	V	$I_F=5.0A$	$T_a=25^{\circ}C$	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}			$T_a=125^{\circ}C$	50				20		
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		5						

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

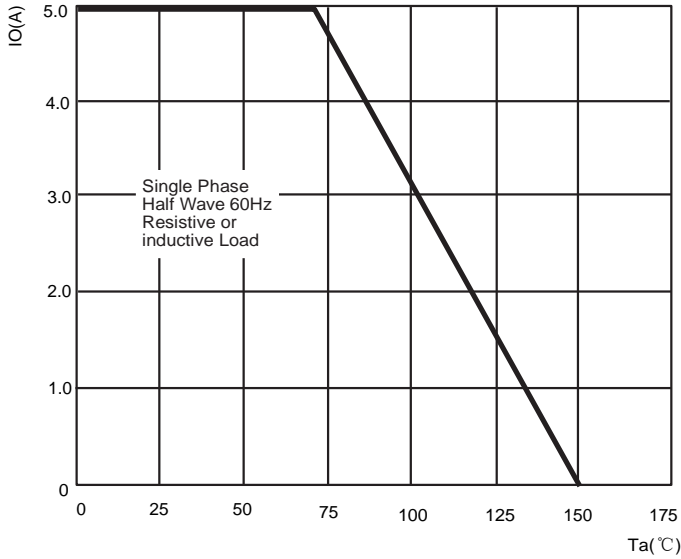


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

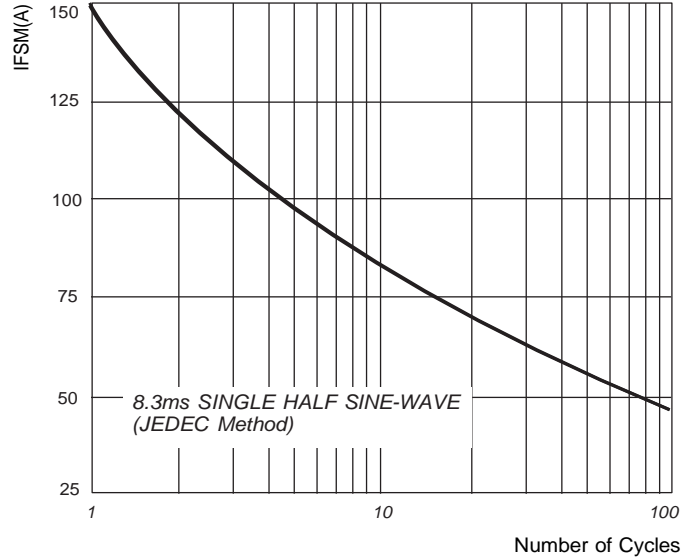


FIG.3: TYPICAL FORWARD CHARACTERISTICS

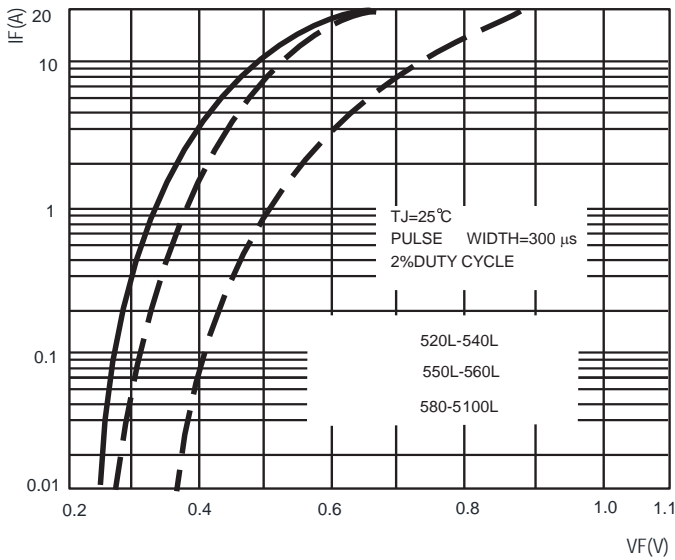
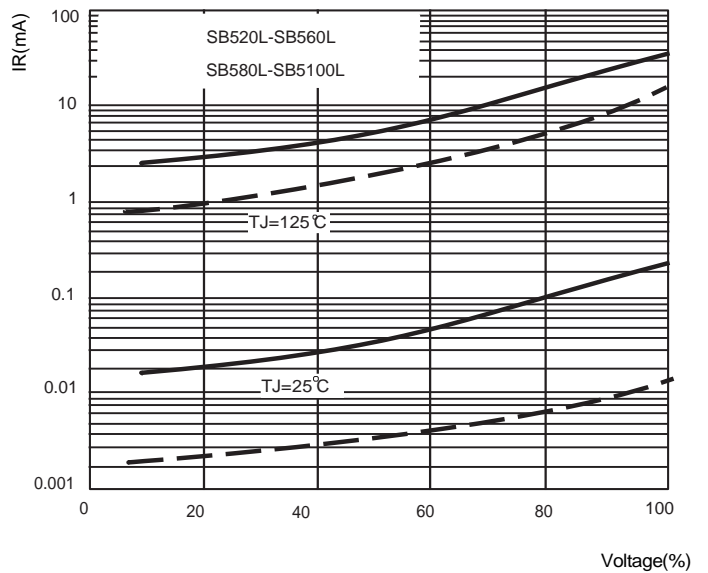
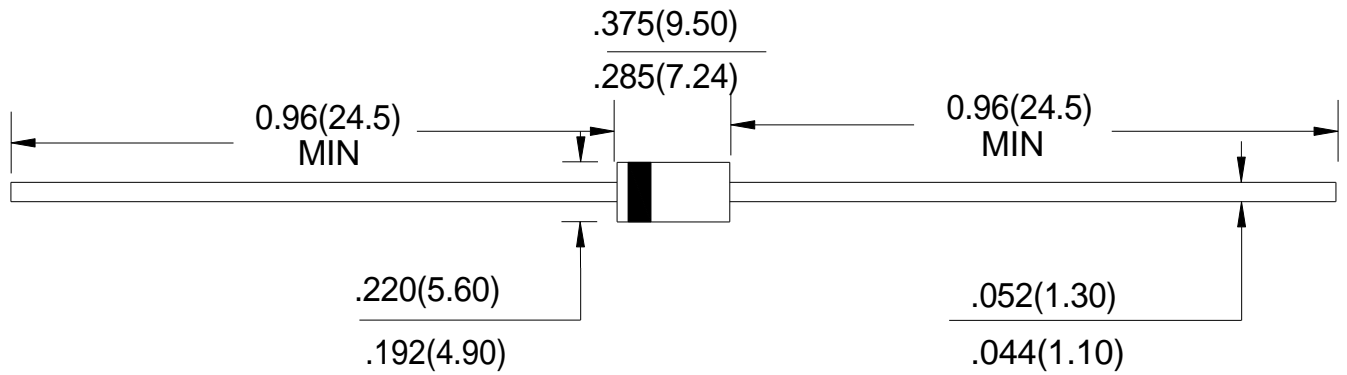


FIG.4: TYPICAL REVERSE CHARACTERISTICS



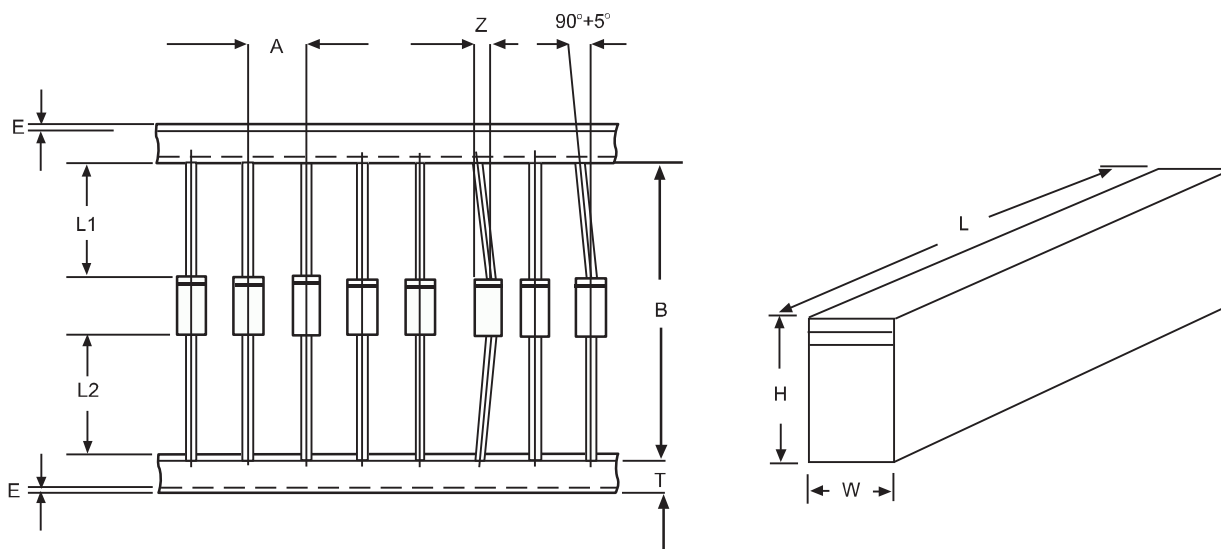
DO-27 Package Outline Dimensions



Unit: in inches (millimeters)

Ammo Box Packaging Specifications For Axial Lead Rectifiers

COMPONENT OUTLINE	COMPONENT PITCH A	INNER TAPE PITCH B	CUMULATIVE PITCH TOLERANCE
	$\pm 0.5\text{mm}(0.020'')$	$+0.5\text{mm}(0.020'')$	
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'')