

## SR2150-G

Forward current: 2.0A

Reverse voltage: 150V

RoHS Device

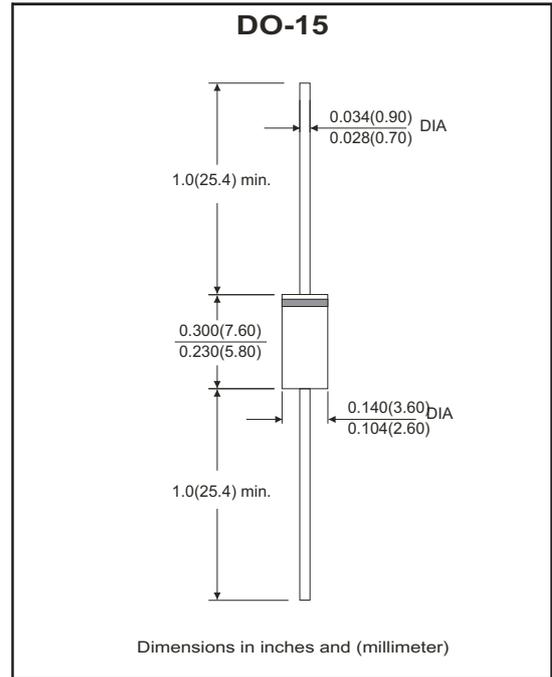


### Features

- Metal-Semiconductor junction with guard ring.
- Epitaxial construction.
- Low forward voltage drop.
- High current capability.
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

### Mechanical Data

- Case: JEDEC DO-15 molded plastic.
- Polarity: color band denoted cathode end.
- Lead: plastic axial lead, solderable per MIL-STD-202E, method 208C.
- Mounting position: any.
- Weight: 0.4 gram.



### Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.  
 Single phase, half wave, 60Hz, resistive or inductive loaded.  
 For capacitive load, derate current by 20% .

Parameter	Symbol	SR2150-G	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	150	V
Maximum RMS voltage	V <sub>RMS</sub>	105	V
Maximum DC blocking voltage	V <sub>DC</sub>	150	V
Maximum average forward rectified current @TL=75°C	I <sub>AV</sub>	2.0	A
Peak forward surge current, 8.3ms single half sine-wave super Imposed on rated load (JEDEC method)	I <sub>FSM</sub>	50	A
Maximum instantaneous forward voltage at 2.0A (Note 1)	V <sub>F</sub>	0.90	V
Maximum DC reverse current at rated DC blocking voltage	@ T <sub>J</sub> =25°C	I <sub>R</sub>	1.0
	@ T <sub>J</sub> =100°C	I <sub>R</sub>	20
Typical junction capacitance (Note 3)	C <sub>J</sub>	150	pF
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	35	°C/W
Operating temperature range	T <sub>J</sub>	-55 ~ +150	°C
Storage temperature range	T <sub>STG</sub>	-55 ~ +150	°C

Note:

1. Pulse test: 300µs pulse width, 1% duty cycle.
2. Thermal resistance from junction to ambient P.C.B. mounted with 0.375" (9.5mm) lead length with 1.5"x1.5"(38x38mm) copper pads.
3. Measured at 1.0 MHz and reverse voltage of 4.0V

## RATING AND CHARACTERISTIC CURVES (SR2150-G)

Fig.1- Forward Current Derating Curve

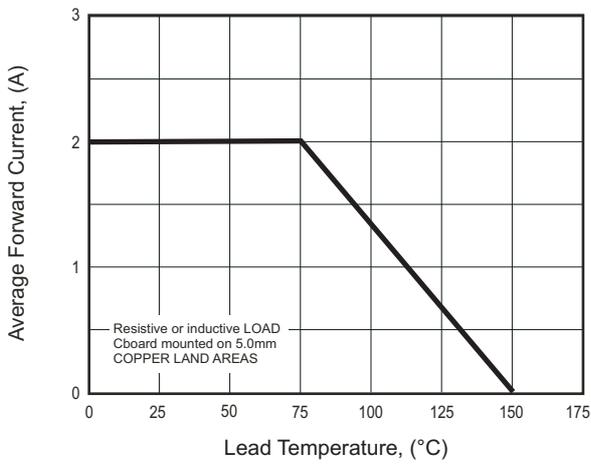


Fig.2- Maximum Non-Repetitive Surge Current

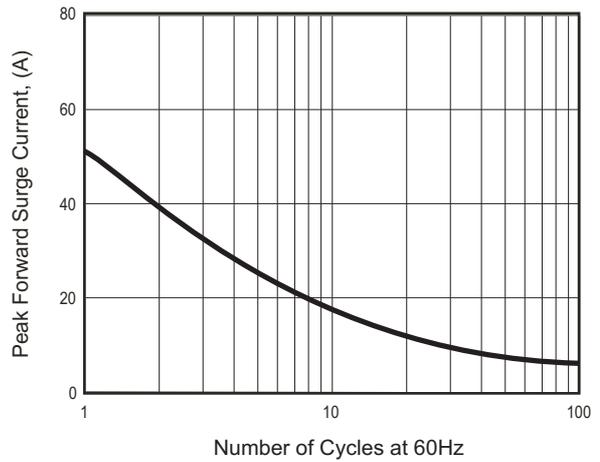


Fig.3- Typical Junction Capacitance

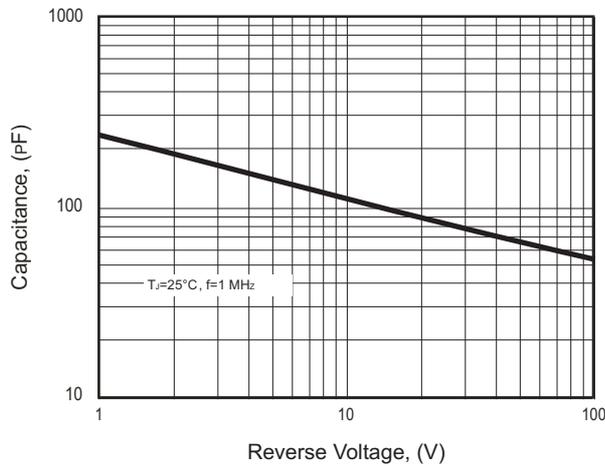


Fig.4- Typical Forward Characteristics

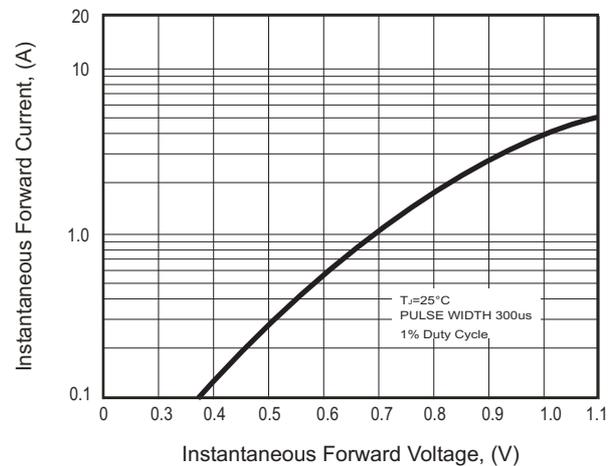
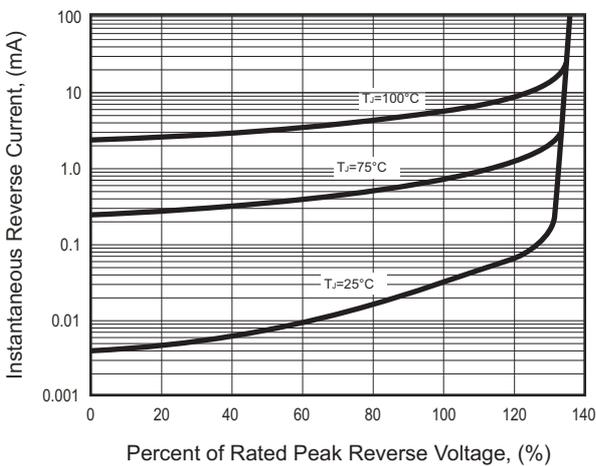
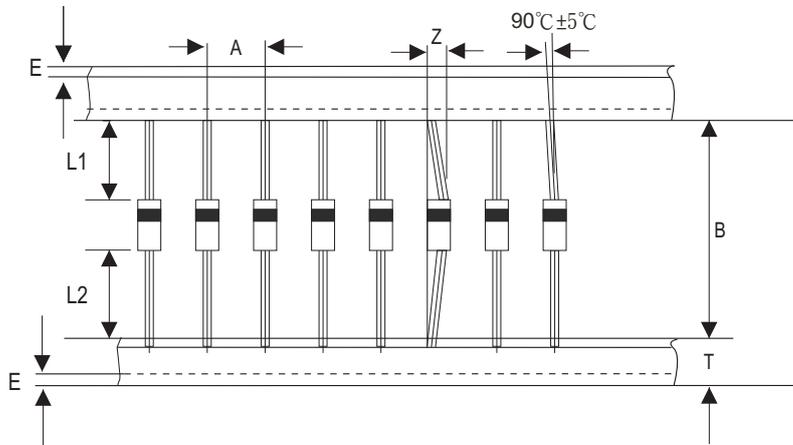


Fig.5- Typica Rever Characteristics

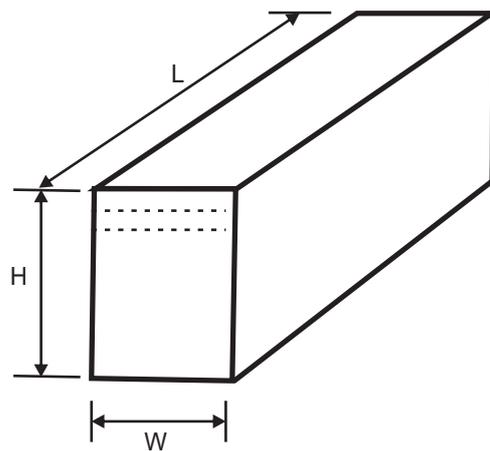


## Ammo Box Packaging Specification For Axial- Lead Rectifiers



DO-15	SYMBOL	A	B	Z	T	E	L1-L2
	(mm)	5.0±0.5	52.4±0.5	1.2 (max)	6.0±0.4	0.8 (max)	1.0 (max)
	(inch)	0.197±0.020	2.047±0.020	0.048 (max)	0.236±0.016	0.032(max)	0.040 (max)

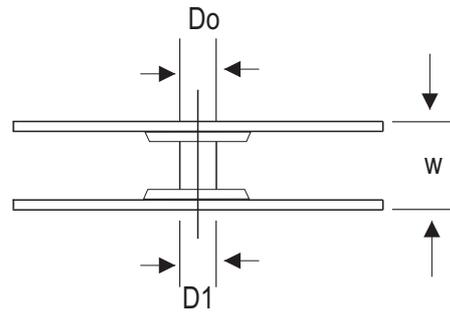
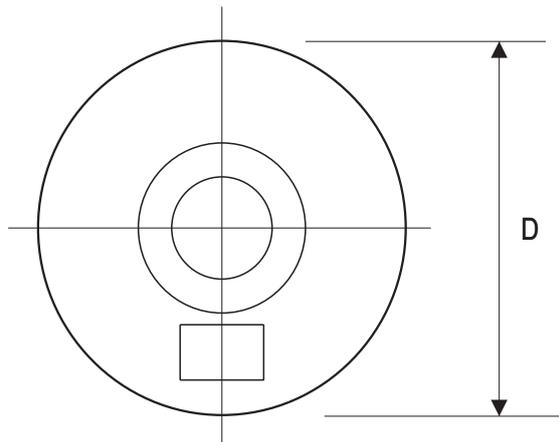
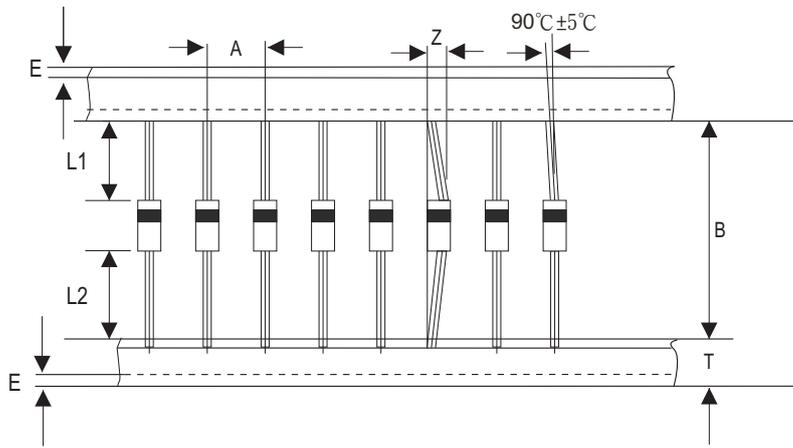
DO-15	SYMBOL	Box Length	Box Width	Box Height
	(mm)	255.0±5.0	78.0±5.0	95.0±5.0
	(inch)	10.04±0.197	3.07±0.197	3.74±0.197



### Standard Packaging

Case Type	AMMO PACK	
	BOX ( pcs )	CARTON ( pcs )
DO-15	3,000	30,000

## Reel Pack Packaging Specification For Axial- Lead Rectifiers



DO-15	SYMBOL	A	B	Z	T	E	L1-L2
	(mm)	5.0 ± 0.5	52.4 ± 0.5	1.2 (max)	6.0 ± 0.4	0.8 (max)	1.0 (max)
	(inch)	0.197 ± 0.020	2.047 ± 0.020	0.048 (max)	0.236 ± 0.016	0.032 (max)	0.040 (max)
DO-15	SYMBOL	D1	Do	W			
	(mm)	85.7 ± 0.3	16.6 ± 0.4	79.0 ± 1.0			
	(inch)	3.374 ± 0.012	0.654 ± 0.016	3.11 ± 0.039			

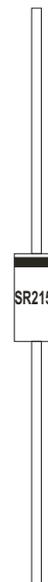
## Marking Code

Part Number	Marking code	Packaging
SR2150 -G	SR2150	AMMO
SR2150T-G	SR2150	REEL
SR2150B-G	SR2150	BULK

Note:

1) Suffix code after part number to specify packaging item .

Packaging	Code
AMMO PACK	NA
REEL PACK	T
BULK PACK	B



## Standard Packaging

Case Type	AMMO PACK	
	BOX ( pcs )	CARTON ( pcs )
DO-15	3,000	30,000

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-15	3,000	13

Case Type	BULK PACK	
	BOX ( pcs )	CARTON ( pcs )
DO-15	500	50,000