

SR2150-G

Forward current: 2.0A

Reverse voltage: 150V

RoHS Device

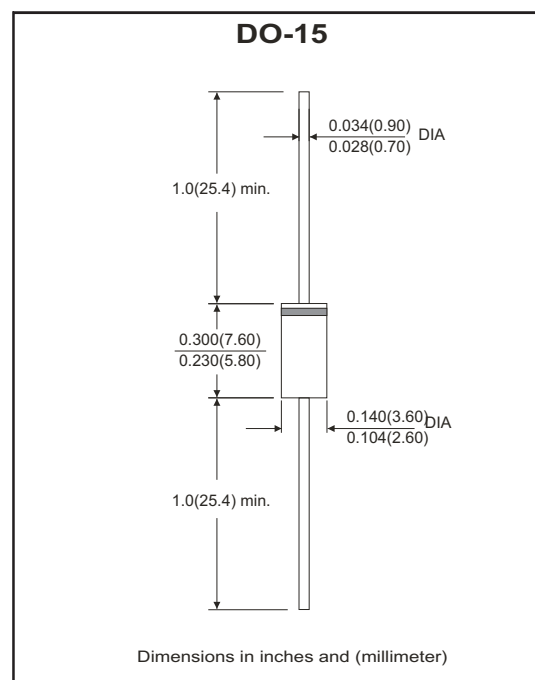


Features

- 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 $T_a=25^{\circ}\text{C}$ 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_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC blocking voltage	V_{DC}	150	V
Maximum average forward rectified current @ $T_L=75^{\circ}\text{C}$	I_{AV}	2.0	A
Peak forward surge current, 8.3ms single half sine-wave super Imposed on rated load (JEDEC method)	I_{FSM}	50	A
Maximum instantaneous forward voltage at 2.0A (Note 1)	V_F	0.90	V
Maximum DC reverse current at rated DC blocking voltage	@ $T_J=25^{\circ}\text{C}$	I_R	1.0
	@ $T_J=100^{\circ}\text{C}$	I_R	20
Typical junction capacitance (Note 3)	C_J	150	pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	35	$^{\circ}\text{C/W}$
Operating temperature range	T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note:

1. Pulse test: 300 μ s 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

REV:A

RATING AND CHARACTERISTIC CURVES (SR2150-G)

Fig.1- Forward Current Derating Curve

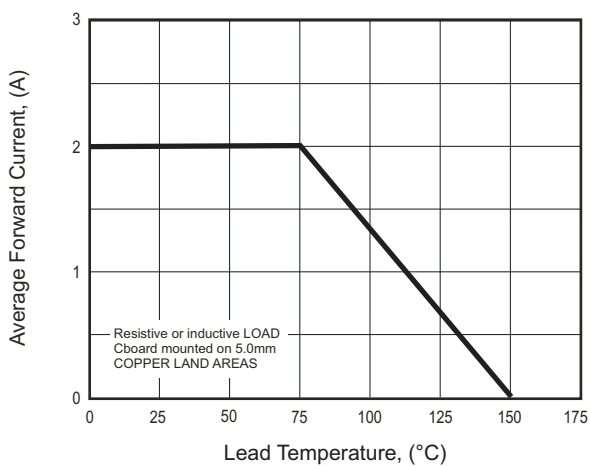


Fig.2- Maximum Non-Repetitive Surge Current

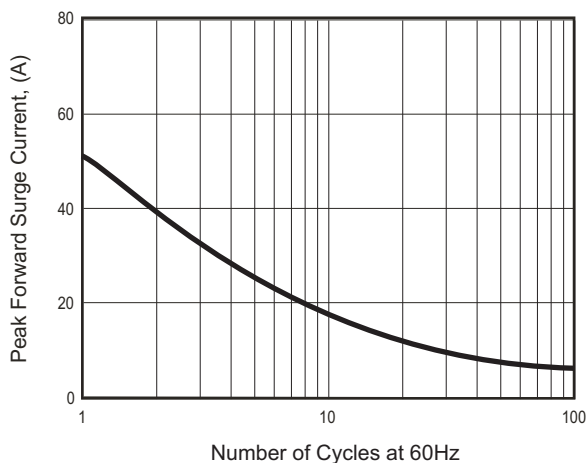


Fig.3- Typical Junction Capacitance

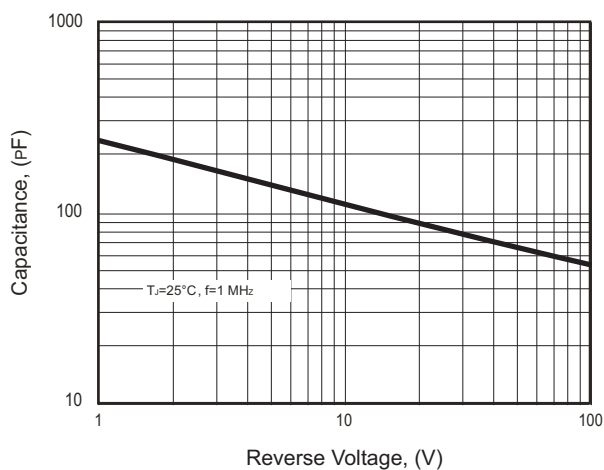


Fig.4- Typical Forward Characteristics

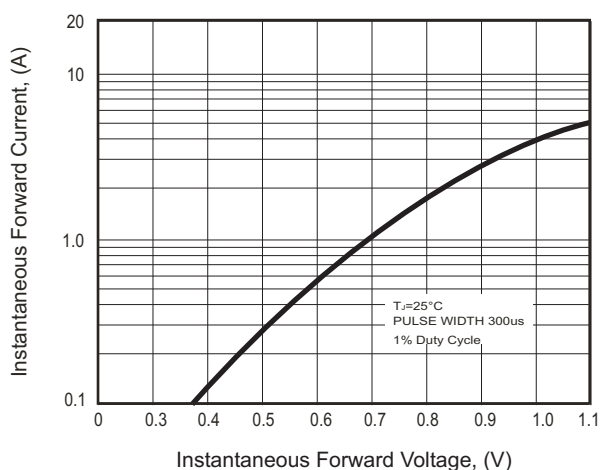
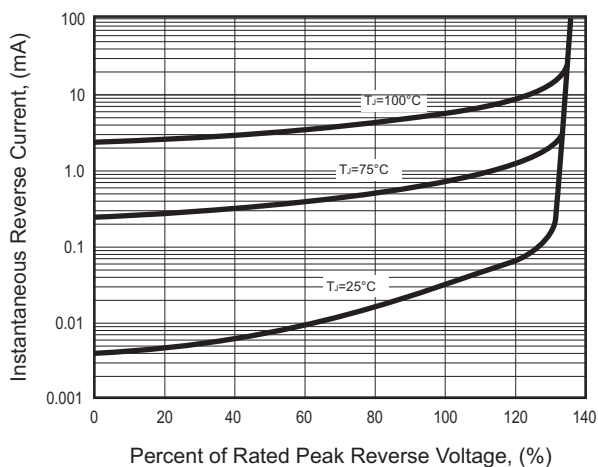
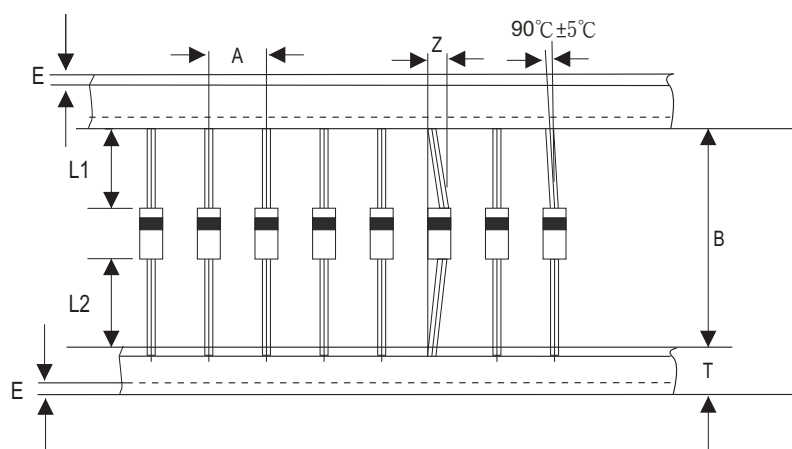


Fig.5- Typica Rever Characteristics

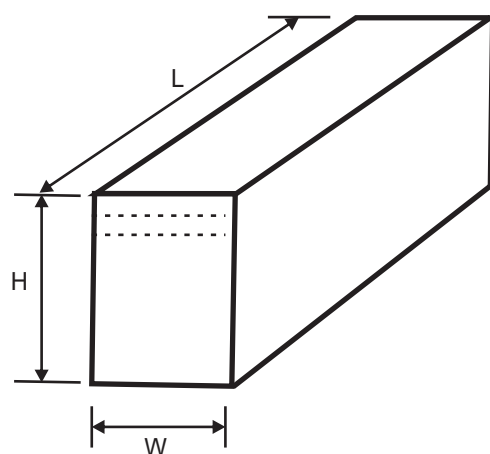


Ammo Box Packaging Specification For Axial- Lead Rectifiers



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)

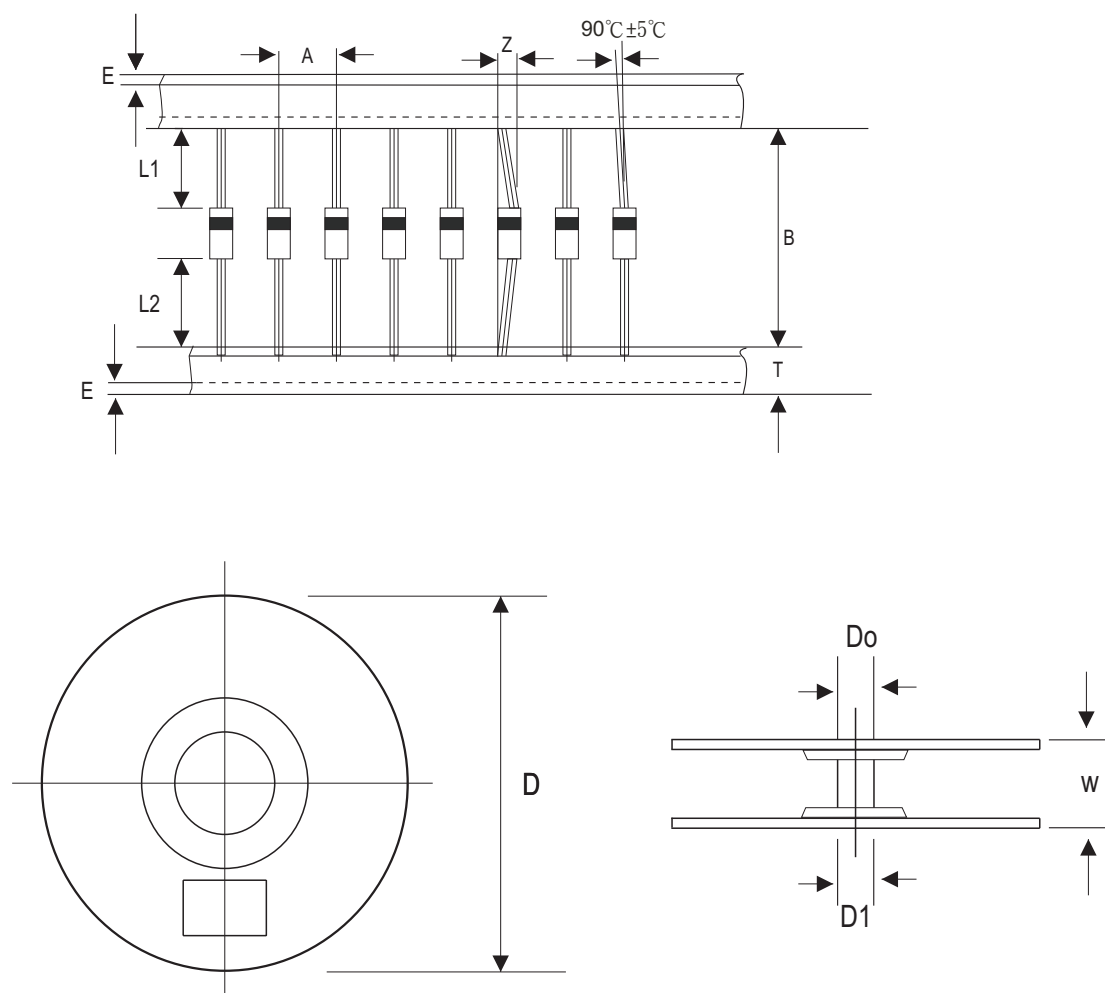
DO-15	SYMBOL	Box Length	Box Width	Box Height
	(mm)	255.0 ± 5.0	78.0 ± 5.0	95.0 ± 5.0
	(inch)	10.04 ± 0.197	3.07 ± 0.197	3.74 ± 0.197



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			

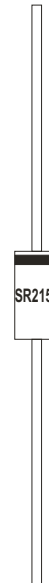
Marking Code

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