

1N5391G THRU 1N5399G



Glass Passivated Silicon Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.5 Ampere

RoHS Device

Halogen Free

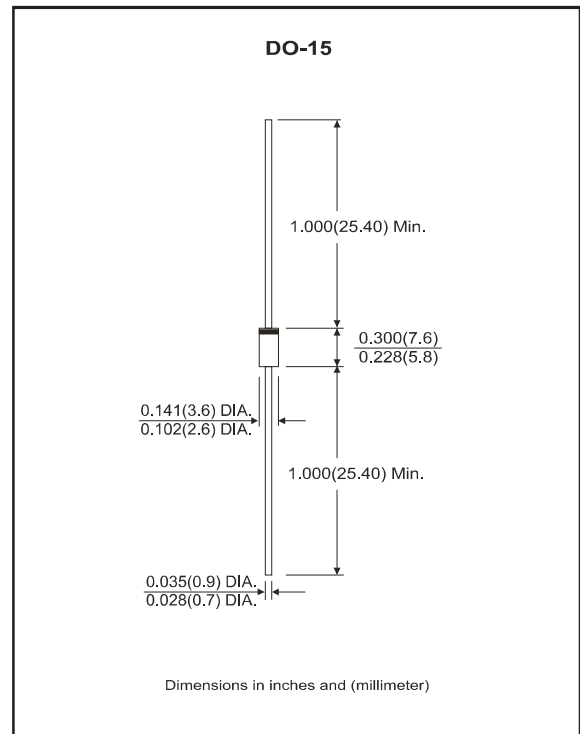


Features

- Low cost
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

Mechanical data

- Case: JEDEC DO-15 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

Parameter		Symbol	1N 5391G	1N 5392G	1N 5393G	1N 5394G	1N 5395G	1N 5396G	1N 5397G	1N 5398G	1N 5399G	Unit
Maximum repetitive peak reverse voltage		V _{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage		V _{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage		V _{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum average forward rectified current @T _A =125°C		I _{F(AV)}	1.5									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	50									A
Maximum instantaneous forward voltage at 1.5A		V _F	1.1									V
Maximum DC reverse current at rated DC blocking voltage	@T _A =25°C	I _R	5.0									μA
	@T _A =100°C		50									
Typical junction capacitance (Note 1)		C _J	20									pF
Typical thermal resistance (Note 2)		R _{θJA}	50									°C/W
Operating junction and storage temperature range		T _J , T _{STG}	-55 to +150									°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance junction to ambient.

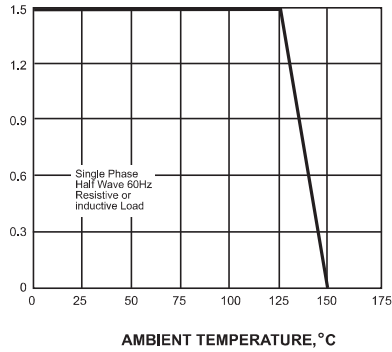
Company reserves the right to improve product design , functions and reliability without notice.

Rev:1.0

Rating and Characteristic Curves

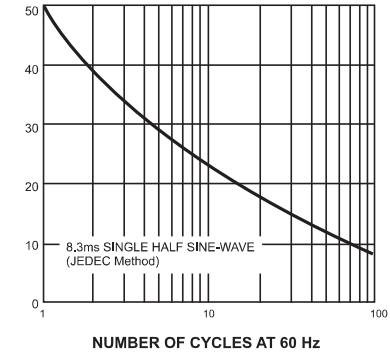
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



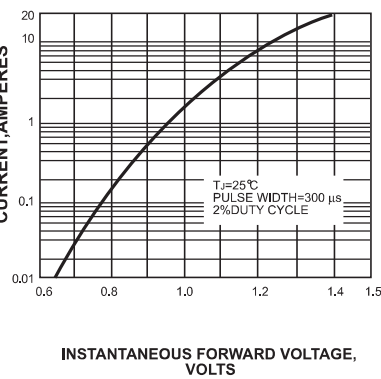
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



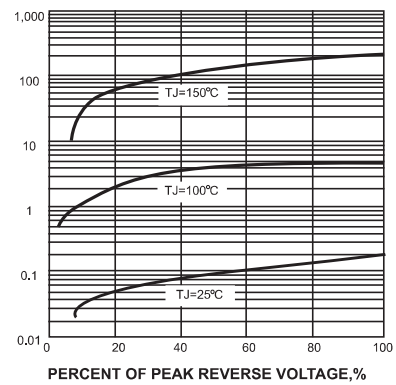
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



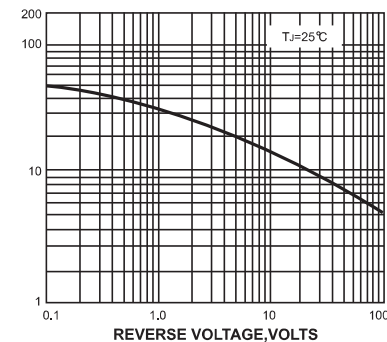
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



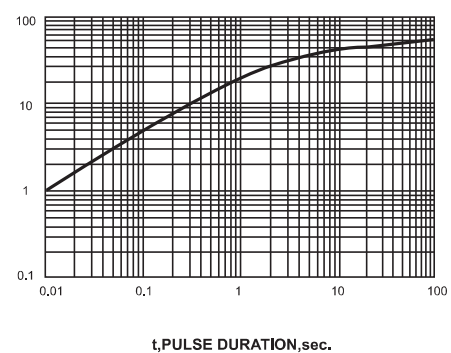
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Marking Code

Part Number	Marking code
1N5391G	1N5391G
1N5392G	1N5392G
1N5393G	1N5393G
1N5394G	1N5394G
1N5395G	1N5395G
1N5396G	1N5396G
1N5397G	1N5397G
1N5398G	1N5398G
1N5399G	1N5399G

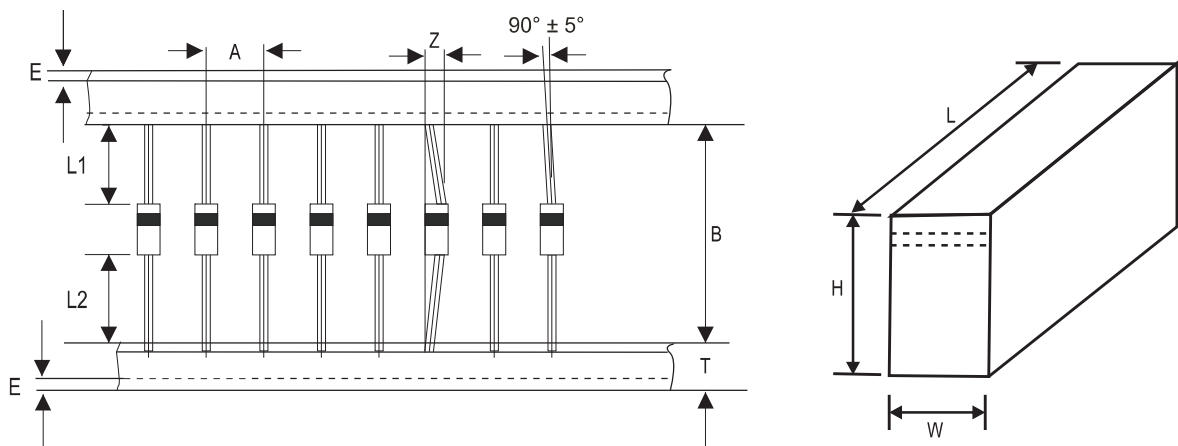


XX = Product type marking code

Standard Packaging

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

Taping Specification For Axial Lead Diodes



DO-15	SYMBOL	A	B	Z	T	E	L1	L2
	(mm)	5.00 ± 0.50	52.40 ± 1.50	1.20 (max)	6.00 ± 0.40	0.80 (max)	1.00 (max)	1.00 (max)
	(inch)	0.197 ± 0.020	2.063 ± 0.059	0.047 (max)	0.236 ± 0.016	0.031 (max)	0.039 (max)	0.039 (max)

DO-15	SYMBOL	L	W	H
	(mm)	255.0 ± 5.0	78.0 ± 5.0	95.0 ± 5.0
	(inch)	10.039 ± 0.197	3.071 ± 0.197	3.740 ± 0.197

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