

FR151G THRU FR157G



Fast Recovery Glass Passivated Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.5 Ampere

RoHS Device

Halogen Free

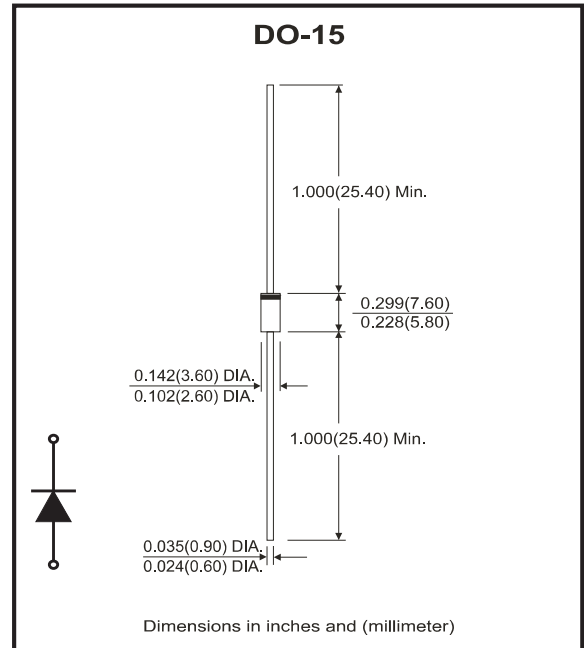


Features

- Glass passivated chip.
- Low forward voltage.
- High reliability.
- High surge current capability.
- High current capability.

Mechanical data

- Case: JEDEC DO-15 molded plastic.
- Epoxy: UL94V-0 rate flame retardant.
- Polarity: Color band denotes cathode end.
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- 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 by 20%

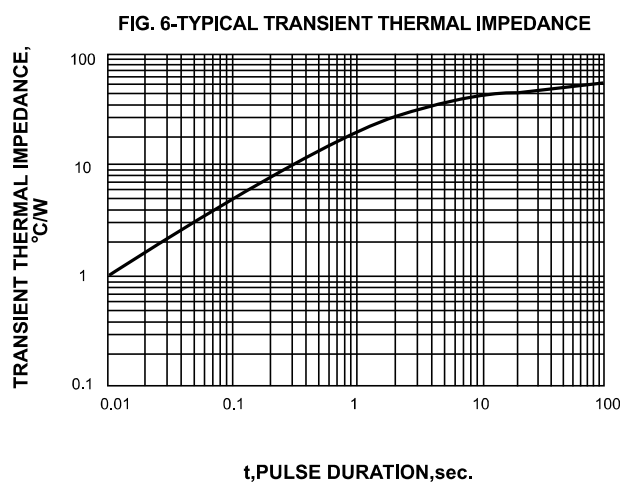
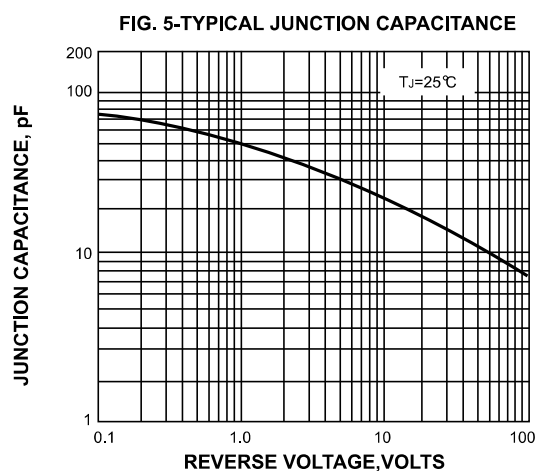
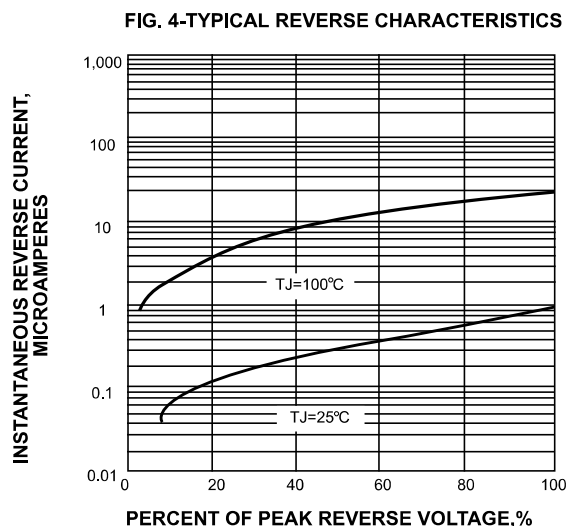
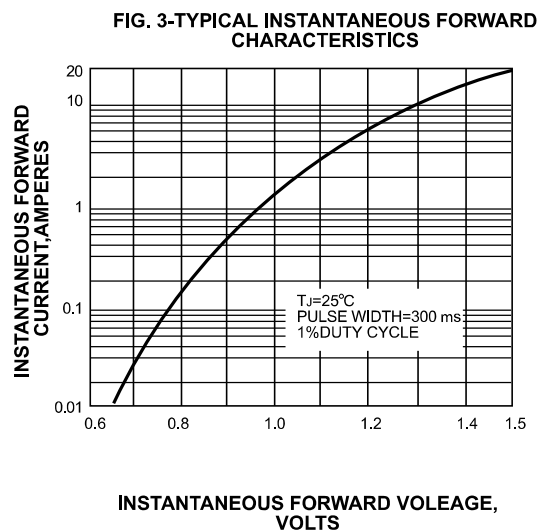
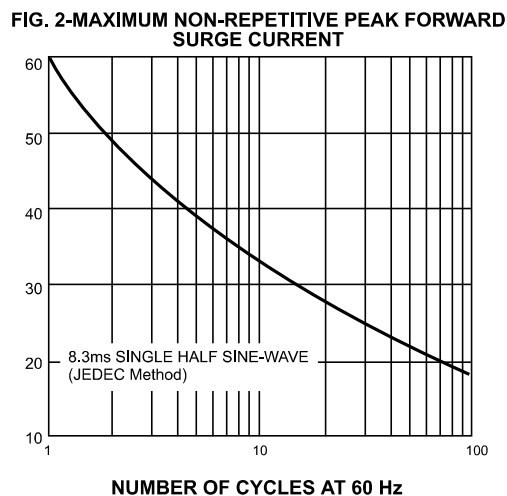
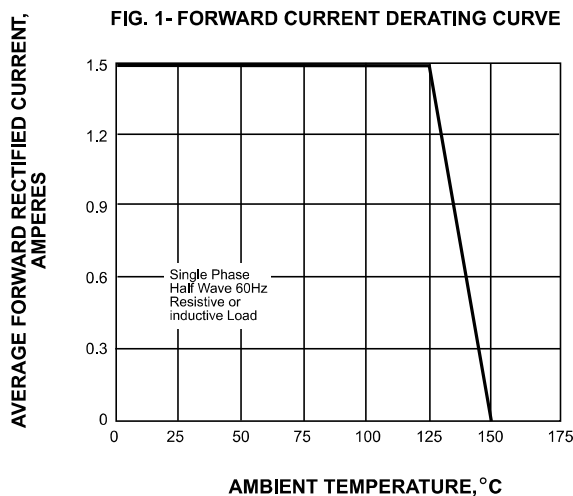
Parameter	Symbols	FR151G	FR152G	FR153G	FR154G	FR155G	FR156G	FR157G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	1.5							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	60							A
Max. forward voltage at 1.5A	V _F	1.3							V
Maximum DC reverse current T _a = 25°C at rated DC blocking voltage T _a =100°C	I _R	5 50							μA
Typical junction capacitance (Note 2)	C _j	30							pF
Maximum reverse recovery time (Note 1)	t _{rr}	150				250	500		ns
Typical thermal resistance (Note 3)	R _{θJA}	50							°C/W
Operating and storage temperature range	T _j , T _{stg}	-65 ~ +150							°C

Notes: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.

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

Rev:1.0

Rating and Characteristic Curves



Marking Code

Part Number	Marking code	Packaging
FR151G	FR151G	AMMO
FR152G	FR152G	AMMO
FR153G	FR153G	AMMO
FR154G	FR154G	AMMO
FR155G	FR155G	AMMO
FR156G	FR156G	AMMO
FR157G	FR157G	AMMO
FR151GT	FR151G	REEL
FR152GT	FR152G	REEL
FR153GT	FR153G	REEL
FR154GT	FR154G	REEL
FR155GT	FR155G	REEL
FR156GT	FR156G	REEL
FR157GT	FR157G	REEL
FR151GB	FR151G	BULK
FR152GB	FR152G	BULK
FR153GB	FR153G	BULK
FR154GB	FR154G	BULK
FR155GB	FR155G	BULK
FR156GB	FR156G	BULK
FR157GB	FR157G	BULK



XXX = Product type marking code

Note:

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

Packaging	Code
AMMO PACK	NA
REEL PACK	T
BULK PACK	B

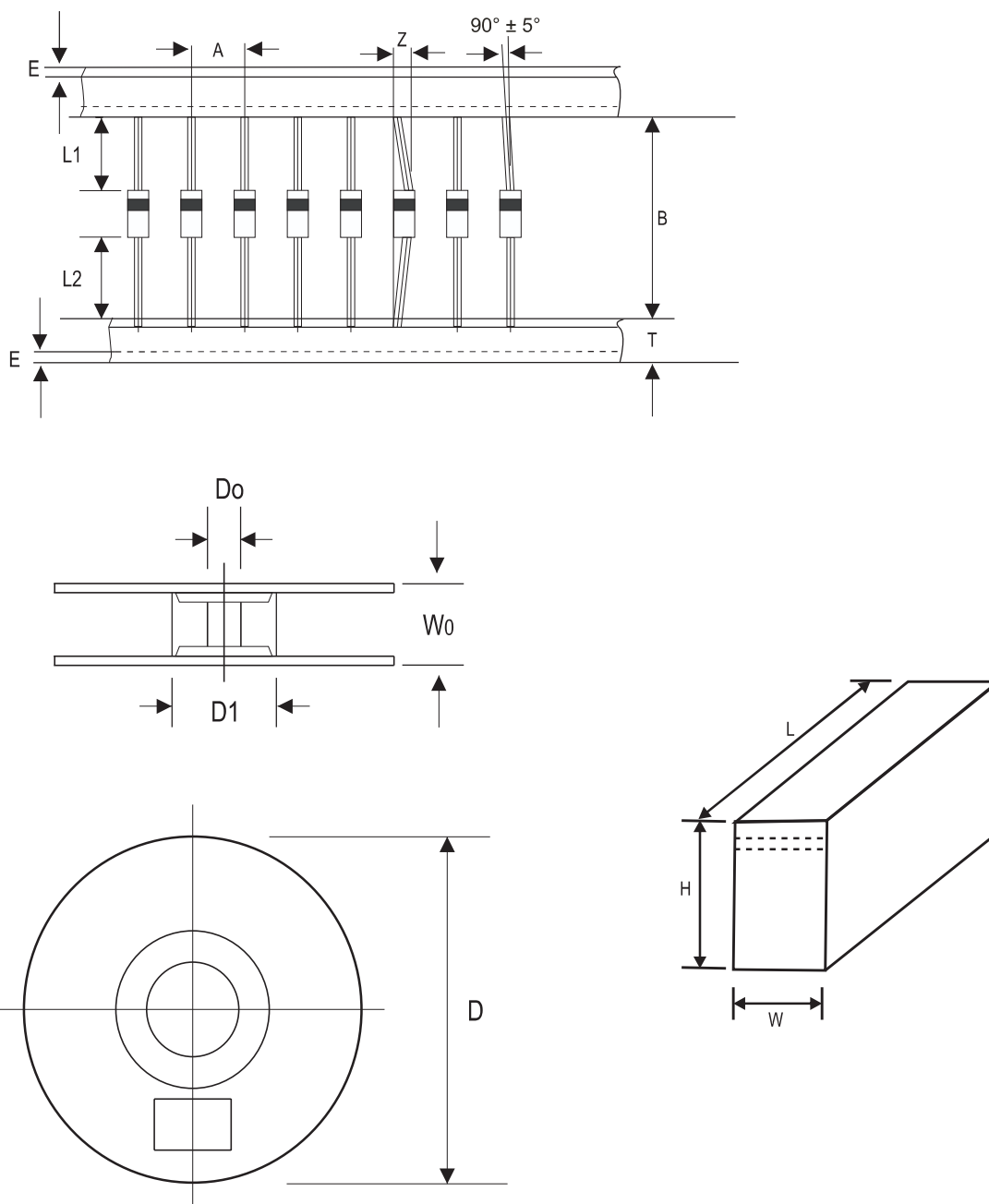
Standard Packaging

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

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-15	4,000	13

Case Type	BULK PACK
	BOX (pcs)
DO-15	500

Taping Specification For Axial Lead Diodes



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

DO-15	SYMBOL	D1	D0	D	W0	L	W	H
	(mm)	85.70 ± 0.30	16.60 ± 0.40	330.00	79.00 ± 1.00	255.00 ± 5.00	75.00 ± 5.00	150.00 ± 5.00
	(inch)	3.374 ± 0.012	0.654 ± 0.016	12.992	3.110 ± 0.039	10.039 ± 0.197	2.953 ± 0.197	5.906 ± 0.197

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