

FR201 THRU FR207



Fast Recovery Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 2.0 Ampere

RoHS Device

Halogen Free

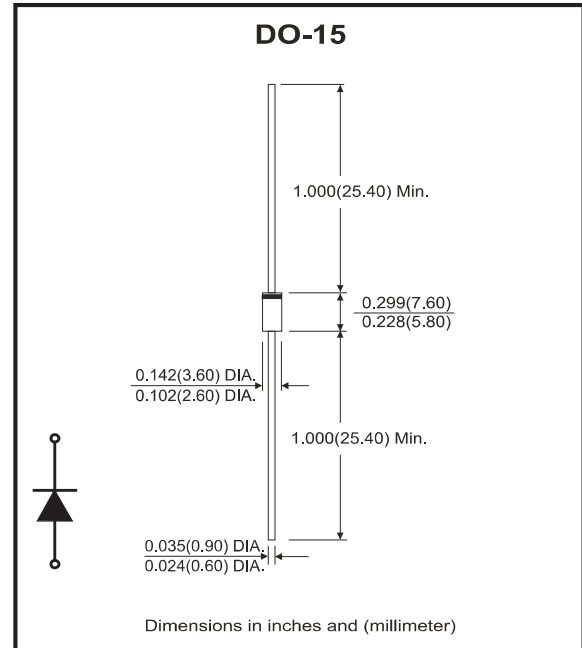


Features

- 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%

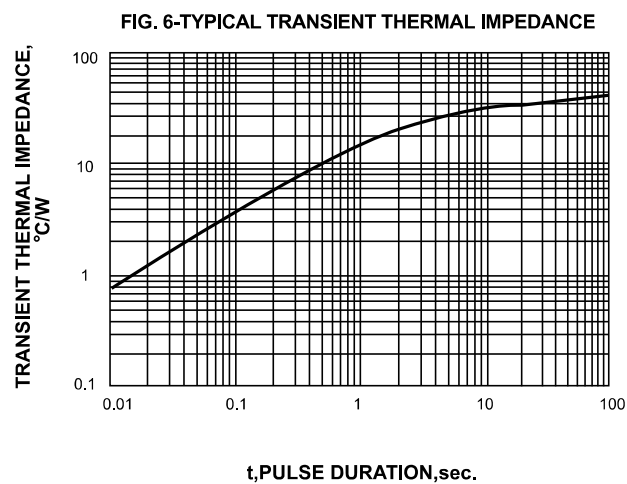
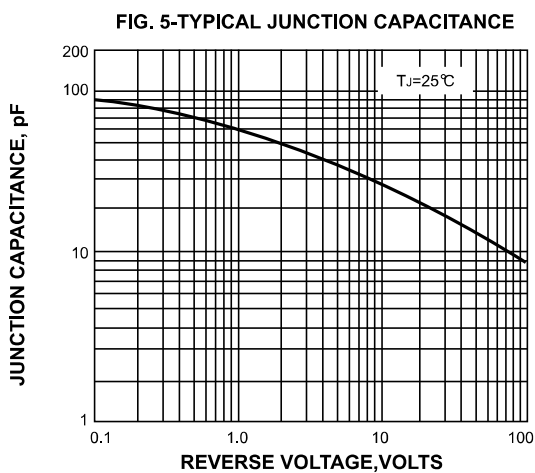
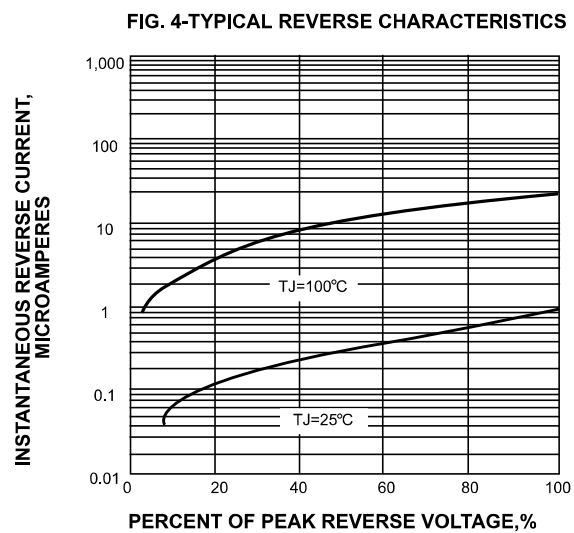
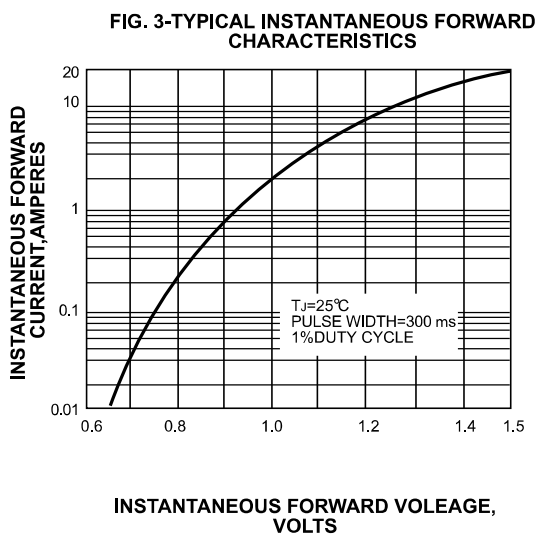
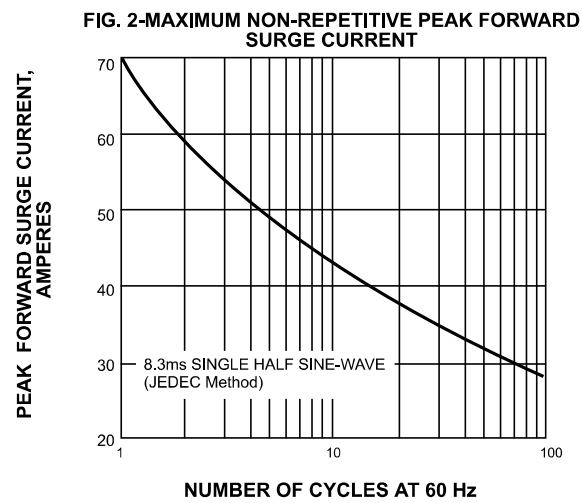
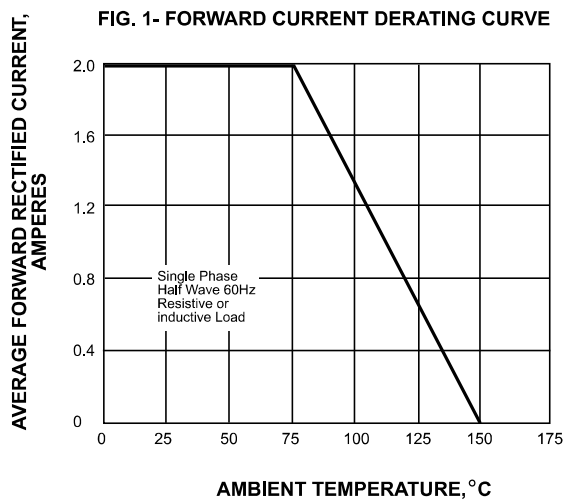
Parameter	Symbols	FR201	FR202	FR203	FR204	FR205	FR206	FR207	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	70							A
Max. forward voltage at 2.0A	V _F	1.3							V
Maximum DC reverse current at rated DC blocking voltage	I _R	5							μA
T _a = 25°C T _a =100°C		50							
Typical junction capacitance (Note 2)	C _j	40							pF
Maximum reverse recovery time (Note 1)	t _{rr}	150					250	500	ns
Typical thermal resistance (Note 3)	R _{θJA}	40							°C/W
Operating and storage temperature range	T _j , T _{stg}	-65 ~ +150							°C

Notes: 1. Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$ (RGI circuit)

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
FR201	FR201	AMMO
FR202	FR202	AMMO
FR203	FR203	AMMO
FR204	FR204	AMMO
FR205	FR205	AMMO
FR206	FR206	AMMO
FR207	FR207	AMMO
FR201T	FR201	REEL
FR202T	FR202	REEL
FR203T	FR203	REEL
FR204T	FR204	REEL
FR205T	FR205	REEL
FR206T	FR206	REEL
FR207T	FR207	REEL
FR201B	FR201	BULK
FR202B	FR202	BULK
FR203B	FR203	BULK
FR204B	FR204	BULK
FR205B	FR205	BULK
FR206B	FR206	BULK
FR207B	FR207	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

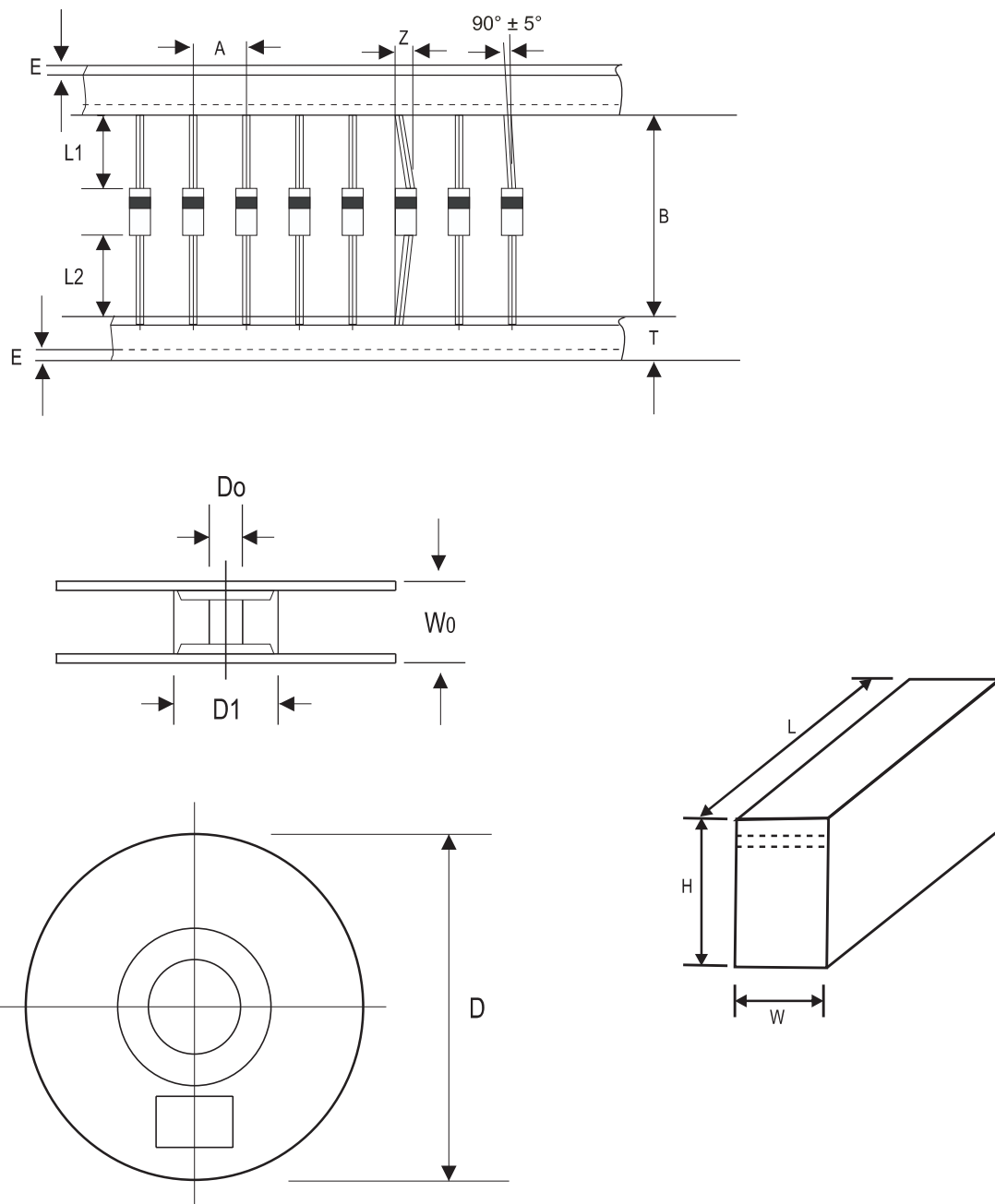
Standard Packaging

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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