

FR101G THRU FR107G



Fast Recovery Glass Passivated Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 1.0 Ampere

RoHS Device

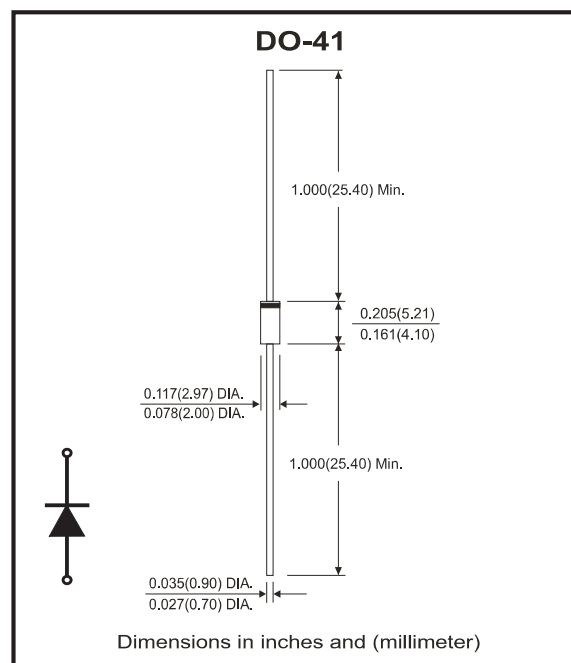
Halogen Free

Features

- Fast switching for high efficiency
- Low reverse leakage current
- High current capability
- Low forward voltage drop
- Low cost
- Meet UL flammability classification 94V-0

Mechanical data

- Case: JEDEC DO-41 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 by 20%

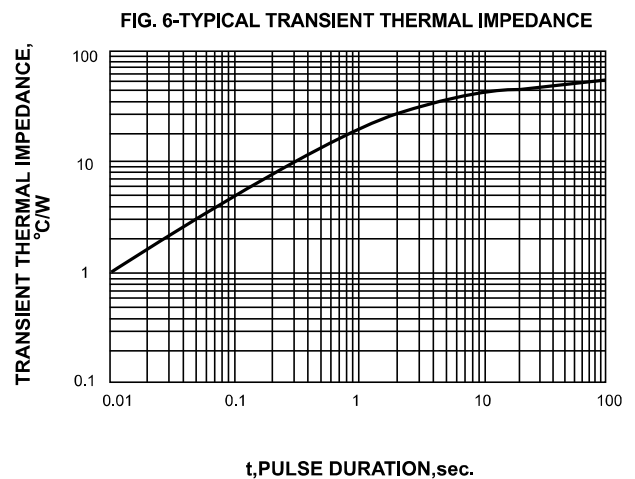
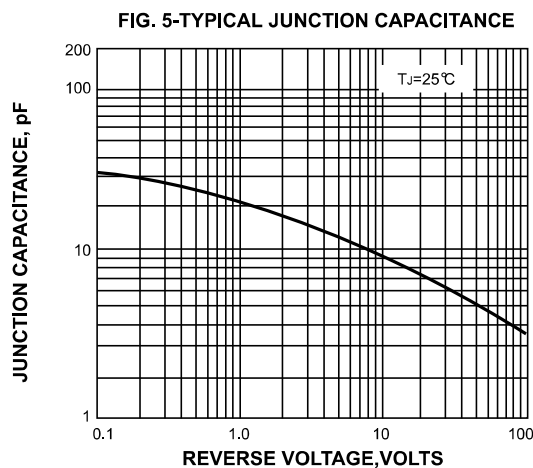
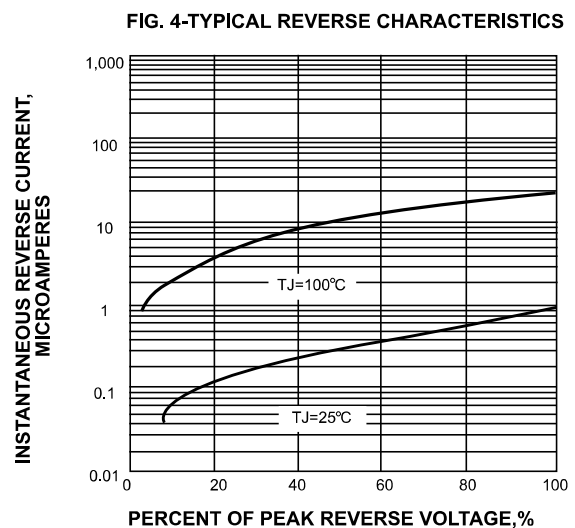
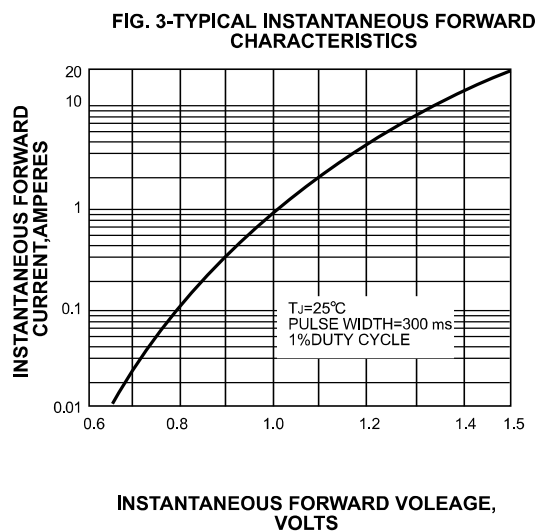
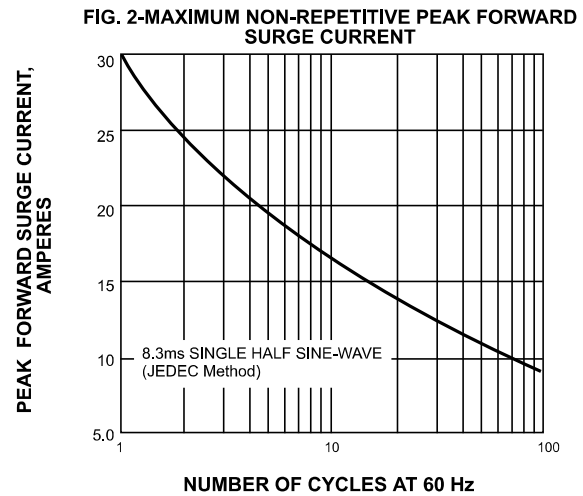
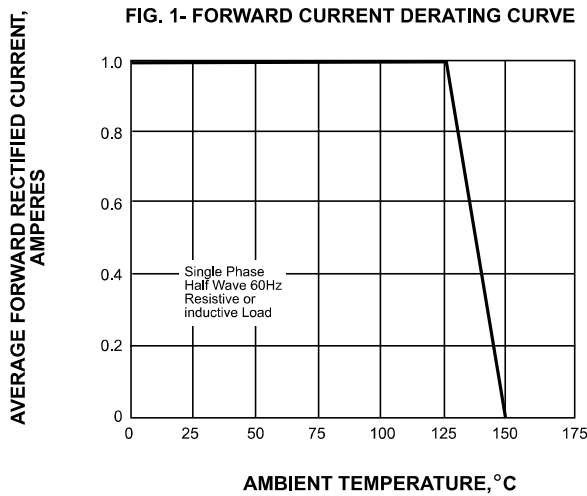
Parameter	Symbols	FR101G	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	1							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Max. forward voltage at 1A	V _F	1.3							V
Maximum DC reverse current at rated DC blocking voltage	I _R	5 50							μA
Typical junction capacitance (Note 2)	C _j	15							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 $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

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

Rev:1.0

Rating and Characteristic Curves



FR101G THRU FR107G



Marking Code

Part Number	Marking code	Packaging
FR101G	FR101G	AMMO
FR102G	FR102G	AMMO
FR103G	FR103G	AMMO
FR104G	FR104G	AMMO
FR105G	FR105G	AMMO
FR106G	FR106G	AMMO
FR107G	FR107G	AMMO
FR101GT	FR101G	REEL
FR102GT	FR102G	REEL
FR103GT	FR103G	REEL
FR104GT	FR104G	REEL
FR105GT	FR105G	REEL
FR106GT	FR106G	REEL
FR107GT	FR107G	REEL
FR101GB	FR101G	BULK
FR102GB	FR102G	BULK
FR103GB	FR103G	BULK
FR104GB	FR104G	BULK
FR105GB	FR105G	BULK
FR106GB	FR106G	BULK
FR107GB	FR107G	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-41	5,000

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-41	5,000	13

Case Type	BULK PACK
	BOX (pcs)
DO-41	1,000

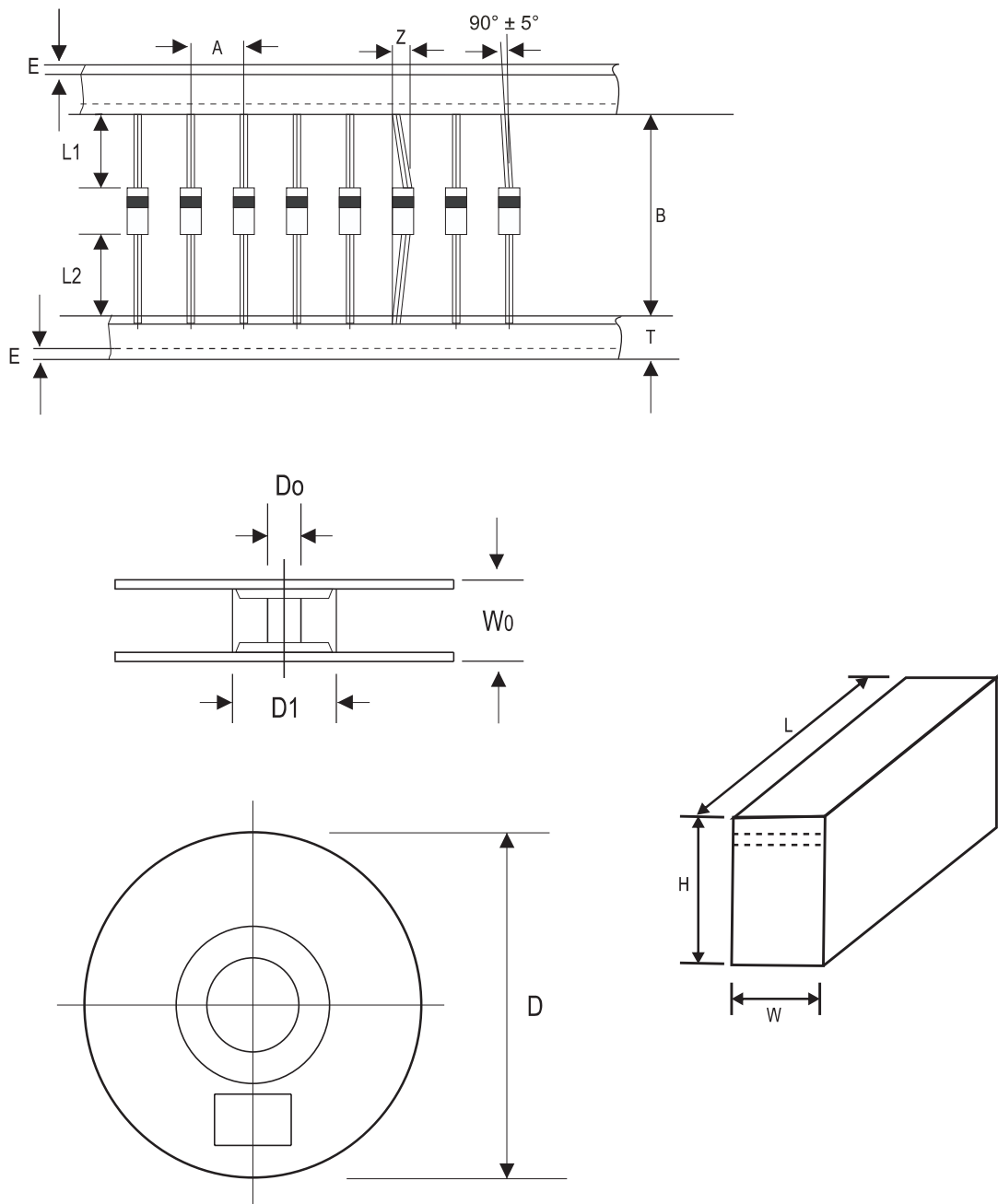
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Taping Specification For Axial Lead Diodes



DO-41	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-41	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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