

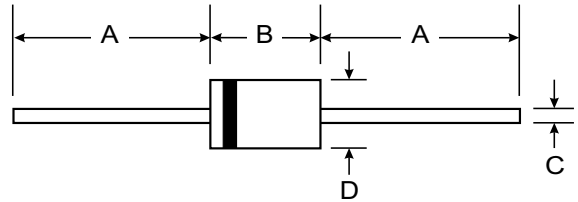
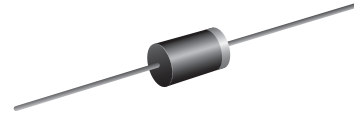
VOLTAGE RANGE: 50 - 1000V
CURRENT: 2.5 A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case: DO - 15 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	FR251	FR252	FR253	FR254	FR255	FR256	FR257	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 55°C	I _O	2.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100							A
Forward Voltage @ I _F = 2.0A	V _{FM}	1.3							V
Peak Reverse Current @ T _A = 25°C At Rated DC Blocking Voltage @ T _A = 100°C	I _{RM}	10 500							μA
Reverse Recovery Time (Note 2)	t _{rr}	150				250	500		nS
Typical Junction Capacitance (Note 3)	C _j	28							pF
Operating Temperature Range	T _j	-65 to +125							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case
 2. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 5.
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (FR251 - FR257)

FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

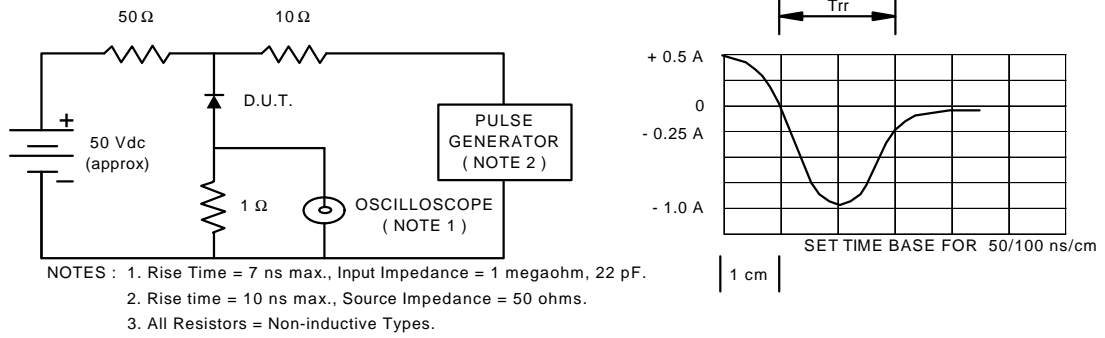


FIG. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

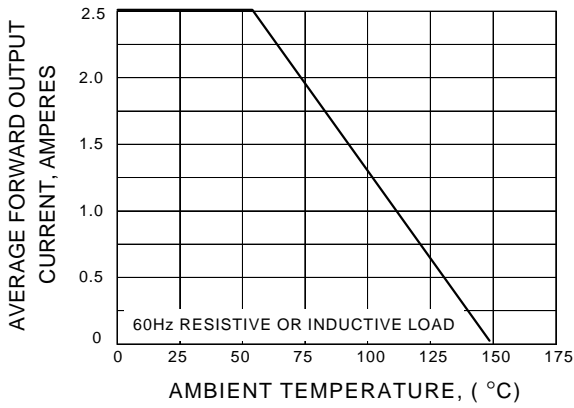


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

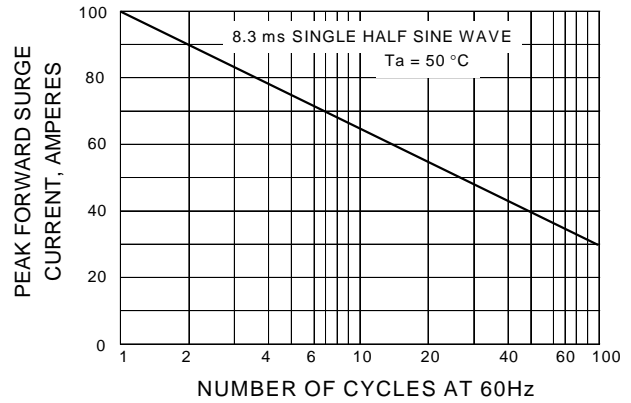


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

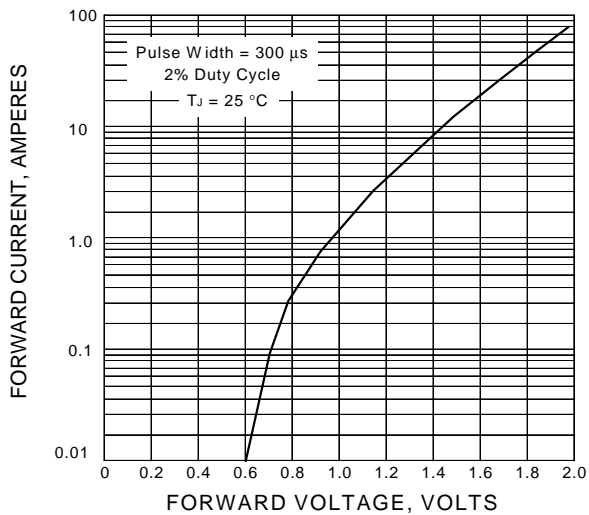


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

