

VOLTAGE RANGE: 50 - 800V

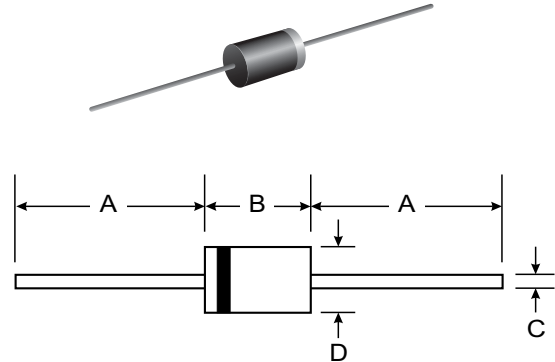
CURRENT: 3.0 A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 1.2 grams (approx.)



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
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	MR850	MR851	MR852	MR854	MR856	MR858	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length T _a = 90 °C	I _{F(AV)}	3.0						A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	100						A
Maximum Peak Forward Voltage at I _F = 3.0 A	V _F	1.25						V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 100 °C	I _R	10						μA
	I _{R(H)}	150						μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150						ns
Typical Junction Capacitance (Note 2)	C _J	28						pf
Junction Temperature Range	T _J	- 65 to + 150						°C
Storage Temperature Range	T _{STG}	- 65 to + 150						°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

RATING AND CHARACTERISTIC CURVES (MR850 - MR858)

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

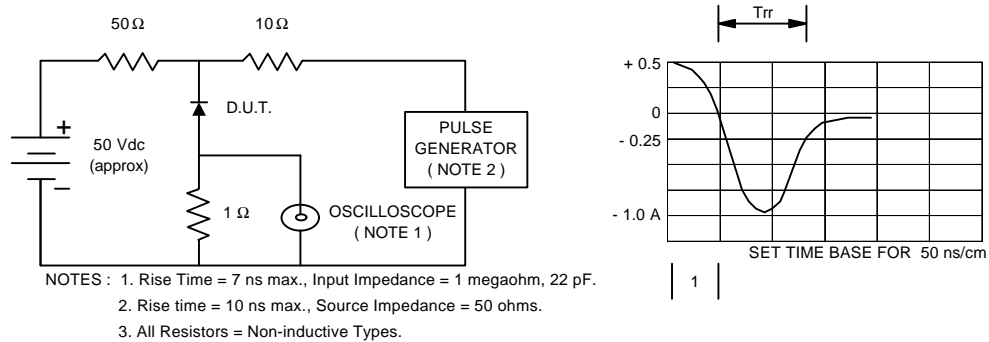


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

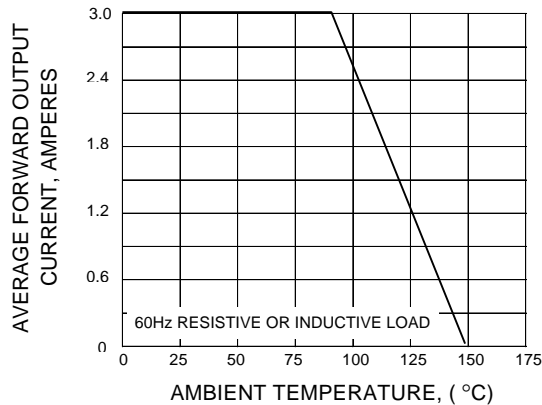


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

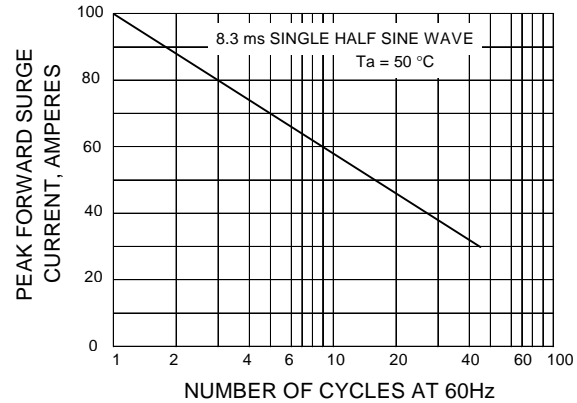


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

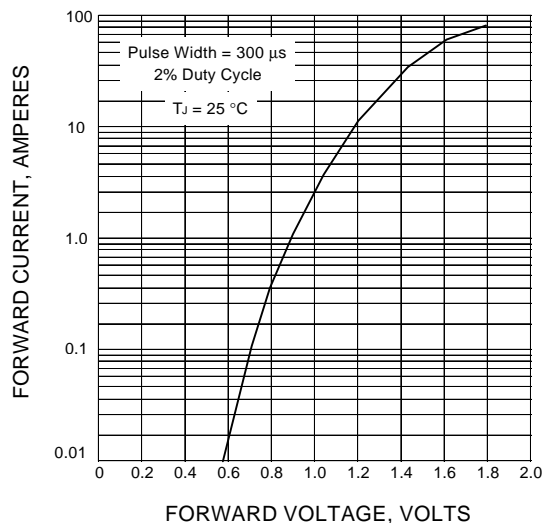


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

