SENSITRON

SEMICONDUCTOR

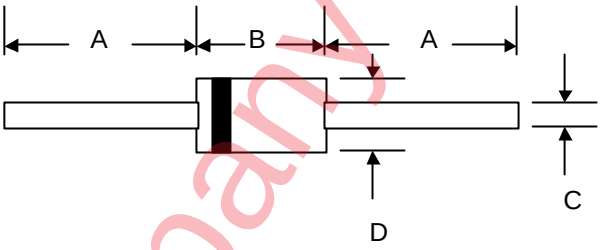
MR850-MR858

3.0A FAST RECOVERY RECTIFIER

Data Sheet 2728, Rev. -

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Fast Recovery Time
- High Surge Current Capability



Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Mounting Position: Any
- Weight: 0.21 grams (approx.)

DO-201AD				
Dim	**Min**	**Max**	**Min**	**Max**
A	25.4	—	1.000	—
B	8.50	9.50	0.335	0.374
C	1.20	1.30	0.047	0.051
D	5.0	5.60	0.197	0.220
All	**In mm**		**In inch**	

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

Characteristic	Symbol	MR850	MR851	MR852	MR854	MR856	MR858	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	V
Average Rectified Output Current @T_L = 75°C	I_O	3.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150						A
Forward Voltage @I_F = 3.0A	V_{FM}	1.25				1.30		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	10 200						µA
Reverse Recovery Time (Note 1)	t_{rr}	100				150		nS
Typical Junction Capacitance (Note 2)	C_j	80						pF
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150						°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

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RATINGS AND CHARACTERISTIC CURVES (MR850-MR858)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

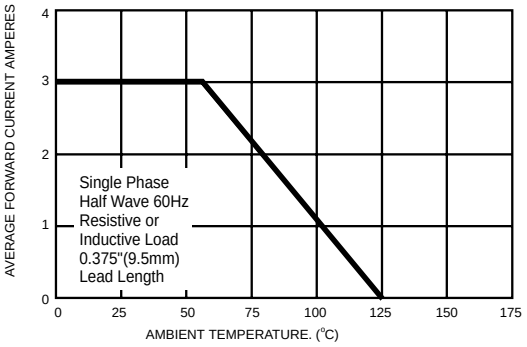


FIG.2- MAXIMUM NON-REPETITIVE PEAK SURGE CURRENT

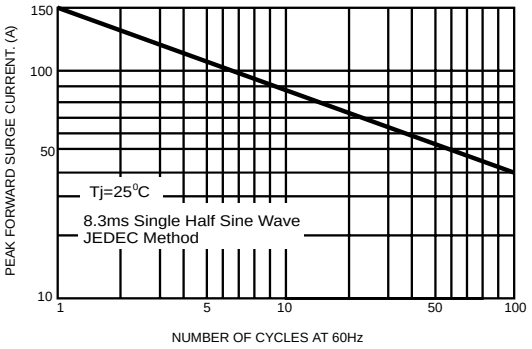


FIG.3- TYPICAL FORWARD CHARACTERISTICS

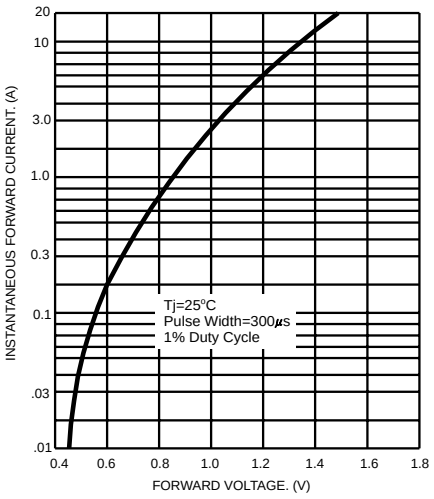


FIG.4- TYPICAL JUNCTION CAPACITANCE

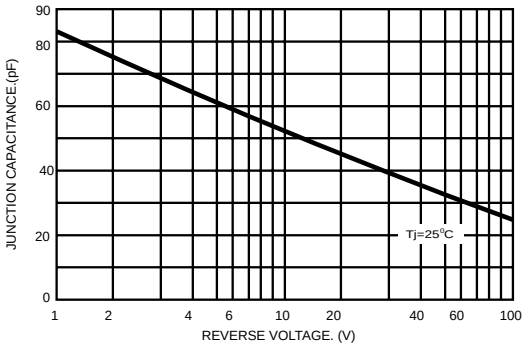
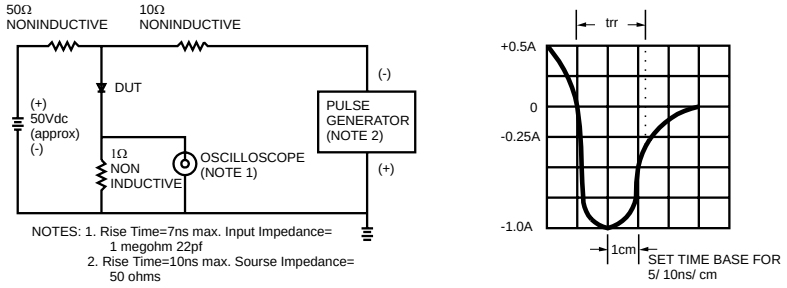


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



TECHNICAL DATA

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