

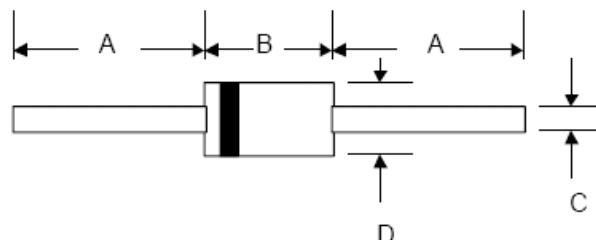
Technical Data

Green Products

Data Sheet N0454, 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
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



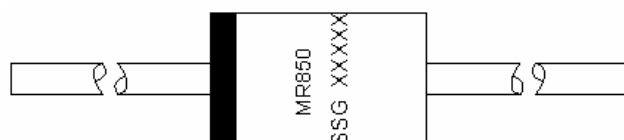
Mechanical Data

- 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	

Marking Diagram:

Where XXXXX is YYWWL



MR850 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
MR850-MR858	DO-201AD (Pb-Free)	1250pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



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_T = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

RATINGS AND CHARACTERISTIC CURVES (MR850-MR858)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

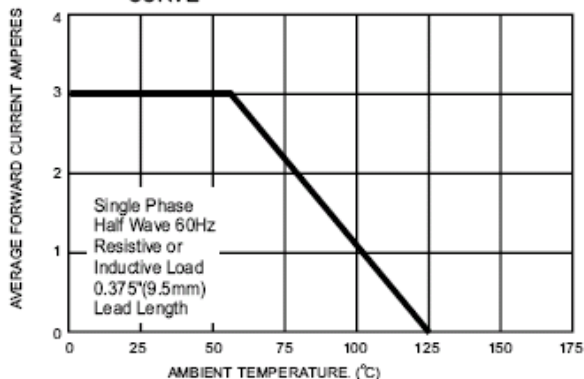


FIG.2- MAXIMUM NON-REPETITIVE PEAK SURGE CURRENT

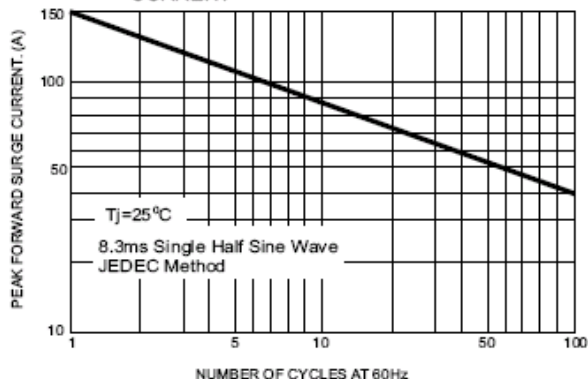


FIG.3- TYPICAL FORWARD CHARACTERISTICS

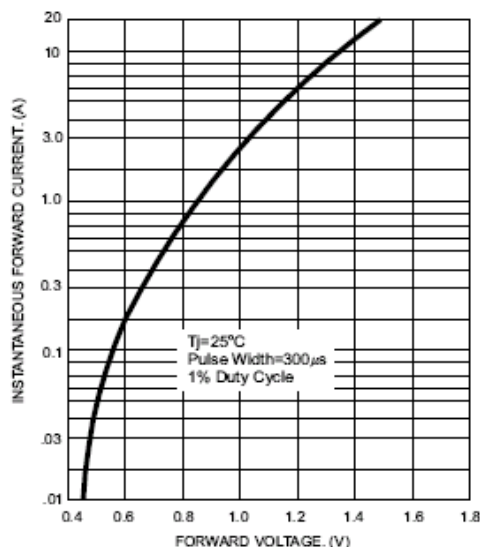


FIG.4- TYPICAL JUNCTION CAPACITANCE

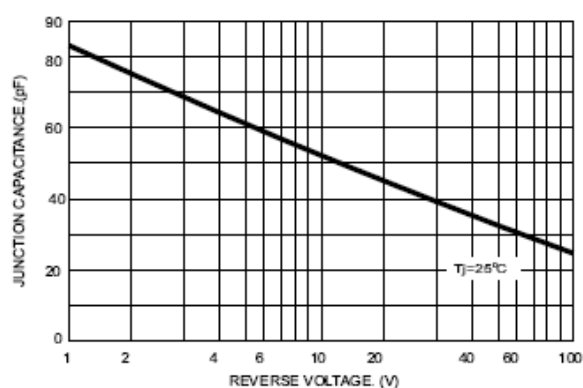
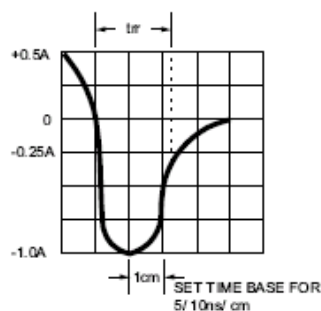
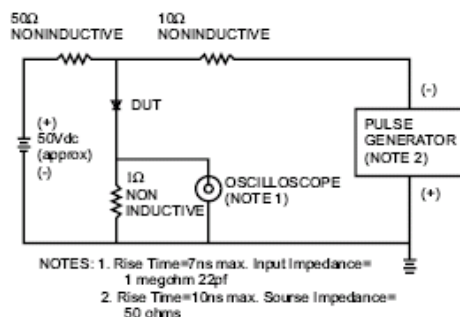


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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