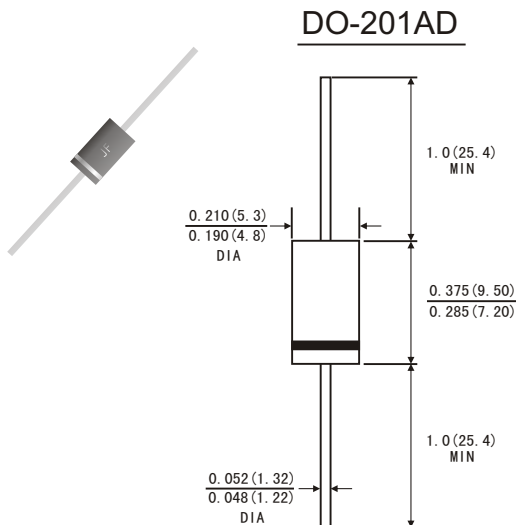


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Diffused junction
- High current capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case:* JEDEC DO-201AD molded plastic body
- *Terminals:* Plated axial leads, solderable per MIL-STD-750,method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.041ounce, 1.18 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Dimensions in inches and (millimeters)

(Rating at 25°C ambient temperature unless otherwise specified. Single phase ,half wave ,60Hz,resistive or inductive load. For capacitive load, derate current by 20%.)

		Symbols	MR 850	MR 851	MR 852	MR 854	MR 856	MR 858	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	Volts
Maximum Average Forward Rectified Current load at $T_A=55^\circ\text{C}$		$I_{(AV)}$	3.0						Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	150.0						Amps
Maximum Instantaneous Forward Voltage at 3.0 A		V_F	1.25				1.3		Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_R	10.0						μA
	$T_A=125^\circ\text{C}$		200						
Maximum reverse recovery time(Note1)		t_{rr}	100				150		ns
Max.thermal resistance(Note 2)		$R_{\theta JA}$	30						$^\circ\text{C/W}$
Typical junction capacitance(Note 3)		C_J	80						pF
Operating junction and storage temperature range		$T_J T_{STG}$	-65 to +150						$^\circ\text{C}$

Note: 1. Test conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.
2. Mount on Cu-Pad size 5mmx5mm on P.C.B.
3. Measured at 1MHz and applied reverse voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES MR850 THRU MR858

FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

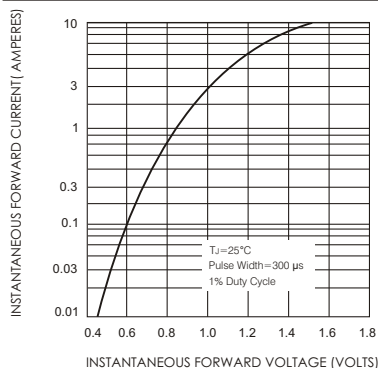


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

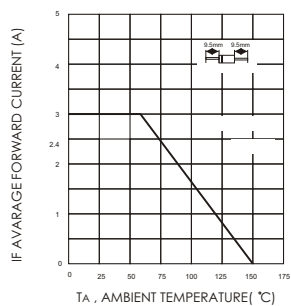


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

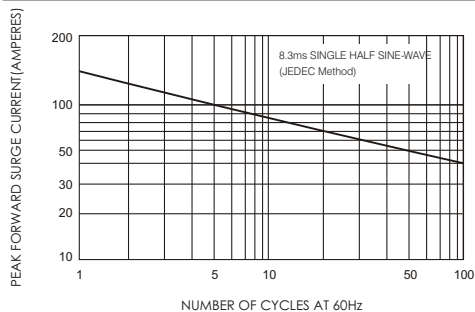


FIG.4-TYPICAL JUNCTION CAPACITANCE

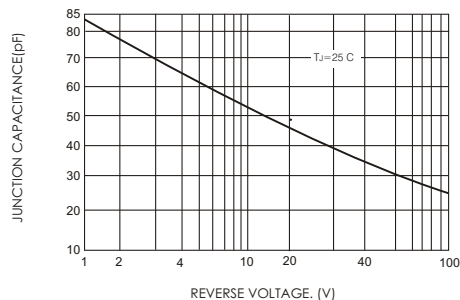
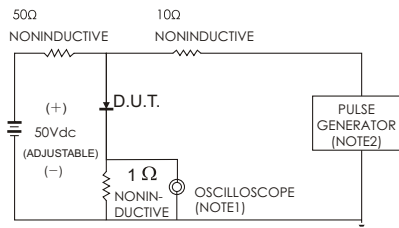


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1.Rise Time=7ns max. input Impedance=1 megohm 22pF
2.Rise Time=10ns max. source Impedance=50 ohms

