

**VOLTAGE RANGE: 50V**  
**CURRENT: 500mA**

### Features

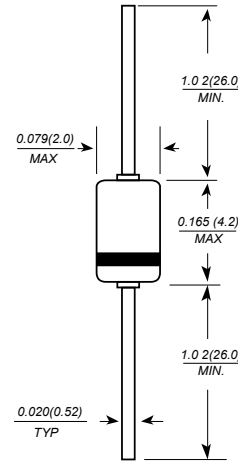
- Low forward voltage
- Hermetically-sealed leaded glass package

### Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



### DO-35(GLASS)



Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	BAT86	Unit
Continuous Reverse Voltage	$V_R$	50	V
Continuous Forward Current	$I_F$	200	mA
Average Forward Current ( $V_{RWM} = 25\text{ V}$ , $T_{amb} = 50^\circ\text{C}$ )	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current (at $t_p \leq 1\text{ s}$ , $\delta \leq 0.5$ )	$I_{FRM}$	500	mA
Non-repetitive Peak Forward Current (at $t_p \leq 10\text{ ms}$ )	$I_{FSM}$	5	A
Operating Ambient Temperature Range	$T_{amb}$	- 65 to + 125	$^\circ\text{C}$
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 65 to + 150	$^\circ\text{C}$
Thermal Resistance from Junction to Ambient	$R_{thja}$	320	K/W
Characteristic	Symbol	Max.	Unit
Forward Voltage			
at $I_F = 0.1\text{ mA}$	$V_F$	300	mV
at $I_F = 1\text{ mA}$	$V_F$	380	mV
at $I_F = 10\text{ mA}$	$V_F$	450	mV
at $I_F = 30\text{ mA}$	$V_F$	600	mV
at $I_F = 100\text{ mA}$	$V_F$	900	mV
Reverse Current			
at $V_R = 40\text{ V}$	$I_R$	5	$\mu\text{A}$
Diode Capacitance			
at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_d$	8	pF
Reverse Recovery Time			
at $I_F = 10\text{ mA}$ , $I_R = 10\text{ mA}$ , $R_L = 100\ \Omega$	$t_{rr}$	4	ns

Fig.1 Derating curve.

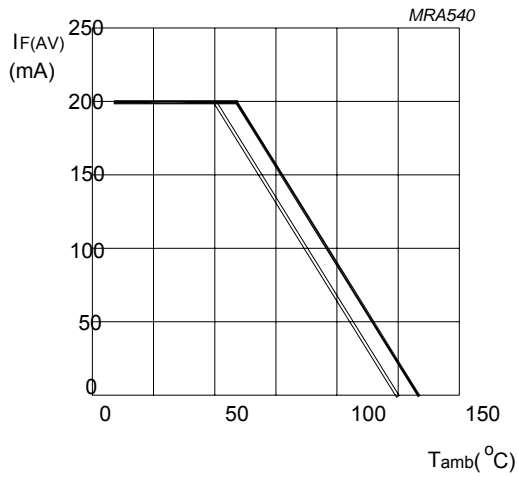


Fig.2 Forward current as a function of forward voltage; typical values.

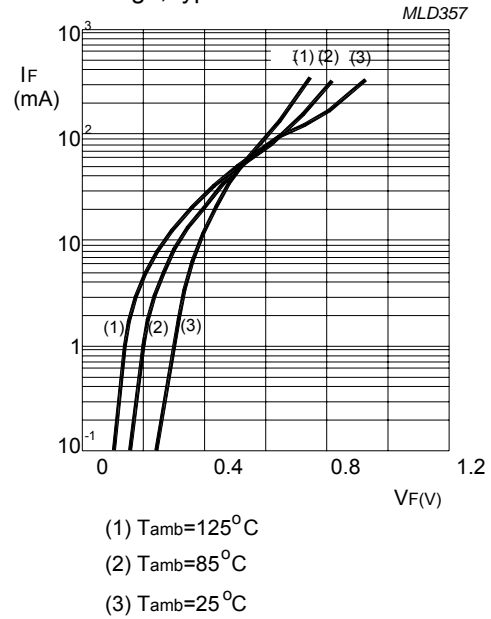


Fig.3 Reverse current as a function of reverse voltage; typical values.

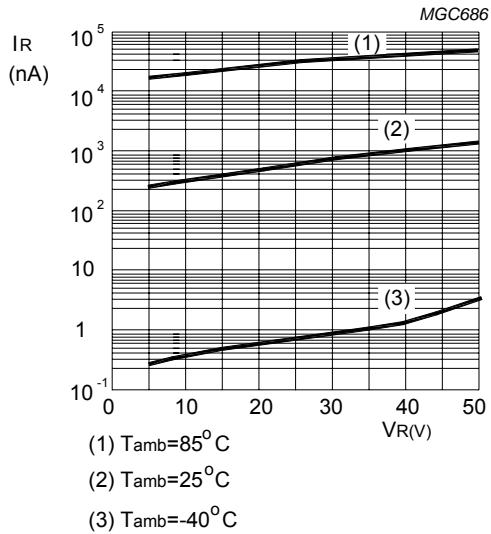


Fig.4 Diode capacitance as a function of reverse voltage; typical values.

