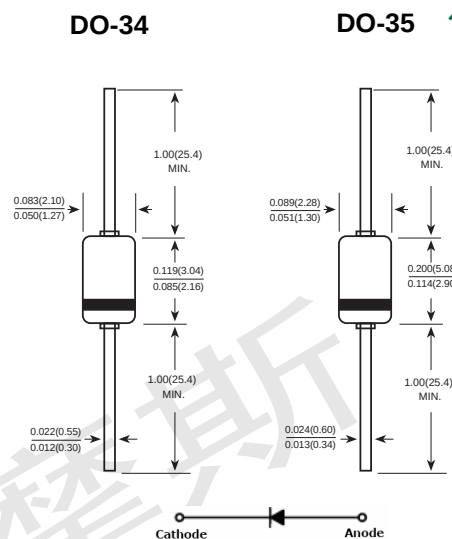


FEATURES

- DO-35 /DO-34 Package (JEDEC)
- High Speed Switching Device ($T_{RR} < 4ns$)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- Cathode indicated by polarity band



Dimensions in inches and (millimeters)

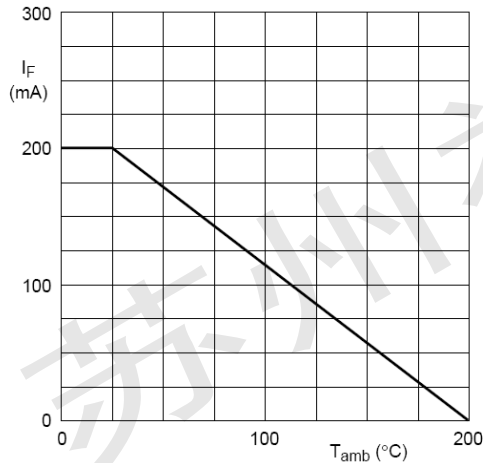
Absolute Maximum Ratings @ $T_A=25^\circ C$ unless otherwise noted

Parameter	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Reverse Voltage	V_R	100	V
Continuous Forward Current see Fig.1	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-Repetitive Peak Forward Current see Fig.3	I_{FSM}	4	A
$t = 1\mu s$		1	A
$t = 1ms$		0.5	A
$t = 1s$			
Power Dissipation	P_D	500	mW
Storage Temperature	T_{stg}	-65 to +200	$^\circ C$
Junction Temperature	T_j	+175	$^\circ C$

Electrical Ratings @ $T_A=25^\circ C$ unless otherwise noted

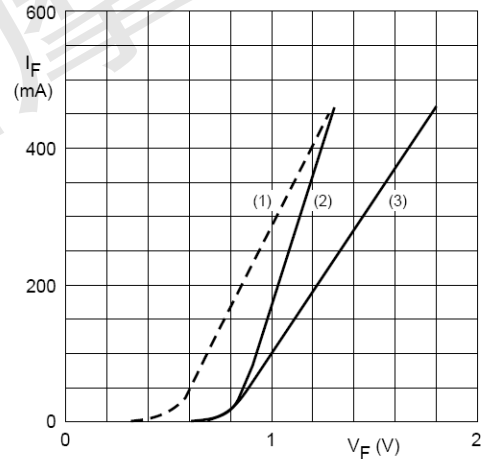
Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward Voltage see Fig.2.	V_F	-	1.0	V	$I_F = 10mA$
1N4148		0.62	0.72	V	$I_F = 5mA$
1N4448		-	1.0	V	$I_F = 100mA$
Reverse Current see Fig.4	I_R		25 5	nA μA	$V_R = 20V$ $V_R = 75V$
Reverse Recovery Time see Fig.6	T_{RR}		4	nS	$I_F = 10mA$, $V_R = 6V$ $R_L = 100\Omega$ $I_{RR} = 1mA$
Capacitance see Fig.5	C		4	pF	$V_R = 0V$, $f = 1MHz$

RATINGS AND CHARACTERISTIC CURVES



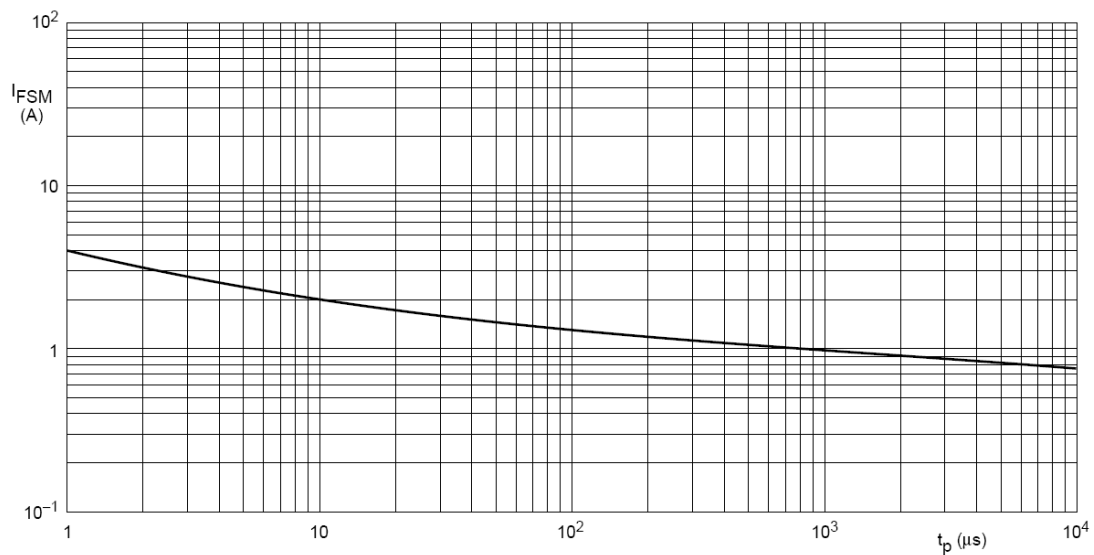
Device mounted on an FR4 printed-circuit board; lead length 10 mm.

Fig.1 Maximum permissible continuous forward current as a function of ambient temperature.



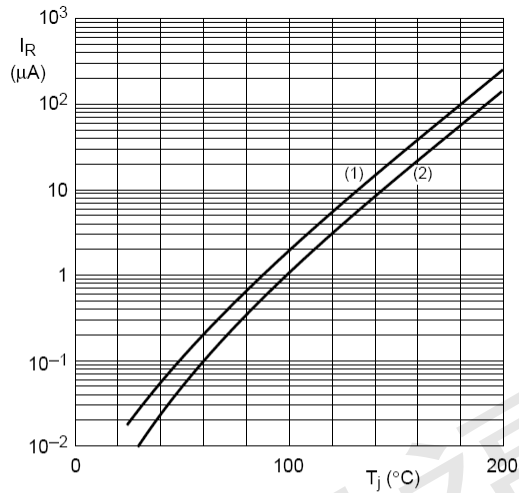
- (1) $T_J = 175^\circ\text{C}$; typical values.
- (2) $T_J = 25^\circ\text{C}$; typical values.
- (3) $T_J = 25^\circ\text{C}$; maximum values.

Fig.2 Forward current as a function of forward voltage.



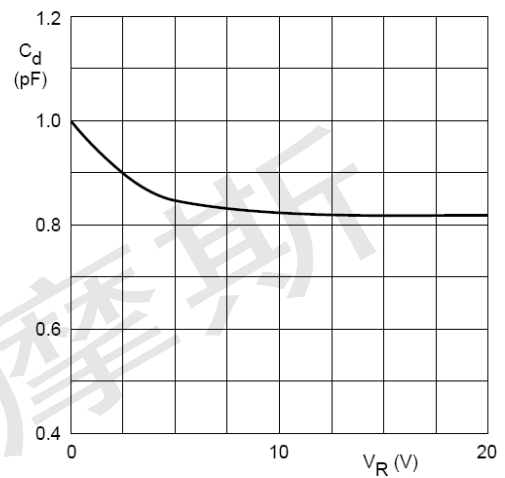
Based on square wave currents.
 $T_J = 25^\circ\text{C}$ prior to surge.

Fig.3 Maximum permissible non-repetitive peak forward current as a function of pulse duration.



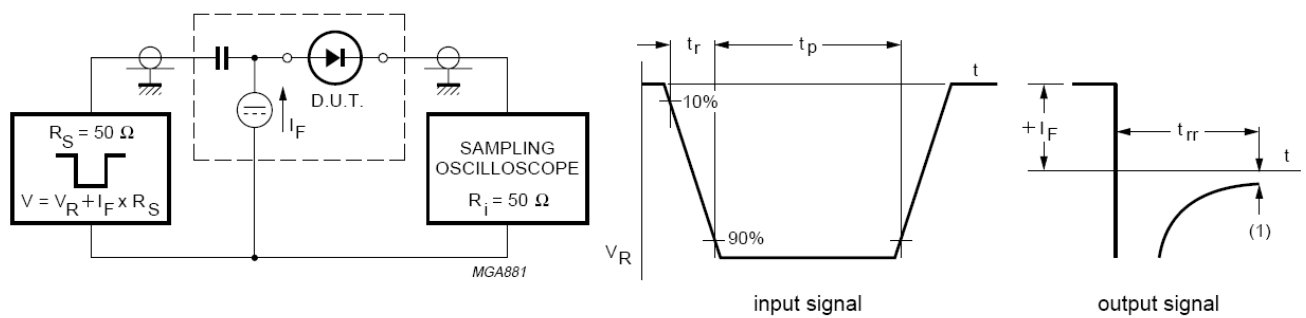
- (1) $V_R = 75 \text{ V}$; typical values.
(2) $V_R = 20 \text{ V}$; typical values.

Fig. 4 Reverse current as a function of junction temperature.



$f = 1 \text{ MHz}$; $T_J = 25^\circ\text{C}$.

Fig. 5 Diode capacitance as a function of reverse voltage; typical values.



(1) $I_R = 1 \text{ mA}$.

Fig. 6 Reverse recovery voltage test circuit and waveforms.