

### Features

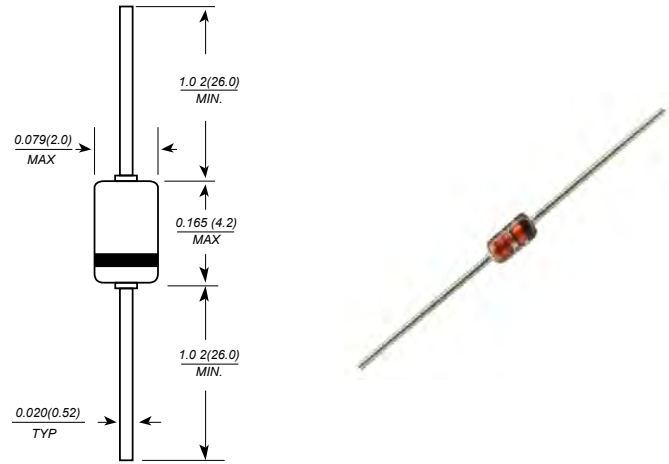
- Switching speed: max. 50 ns
- Continuous reverse voltage: max. 90V
- Repetitive peak reverse voltage: max. 90V
- Repetitive peak forward current: max.800 mA
- Repetitive peak reverse current: max.600mA

### Mechanical Data

- Case : DO-35 Glass Case
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.13 gram (approximately)



### DO-35(GLASS)



Dimensions in millimeters

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	90	V
Continuous Reverse Voltage	V <sub>R</sub>	90	V
Continuous Forward Current	I <sub>F</sub>	400	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	800	A
Non-repetitive Peak Forward Current	I <sub>FSM</sub>	55	A
Square wave: T <sub>j</sub> = 25 °C prior to surge		t = 1 μs	
		t = 100 μs	
		9	
Total Power Dissipation , T <sub>a</sub> = 25 °C	P <sub>tot</sub>	450	mW
Repetitive Peak Reverse Current	I <sub>RRM</sub>	600	mA
Junction Temperature	T <sub>J</sub>	200	°C
Storage Temperature Range	T <sub>S</sub>	-65 to + 200	°C

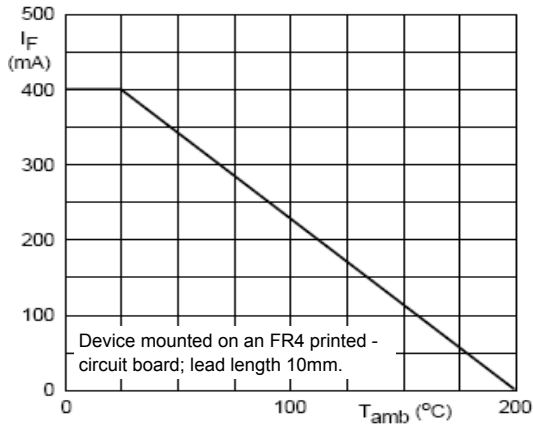
Note : (1) Device mounted on an FR4 printed circuit-board; lead length 10 mm.

### ELECTRICAL CHARACTERISTICS (T<sub>J</sub> = 25°C unless otherwise noted)

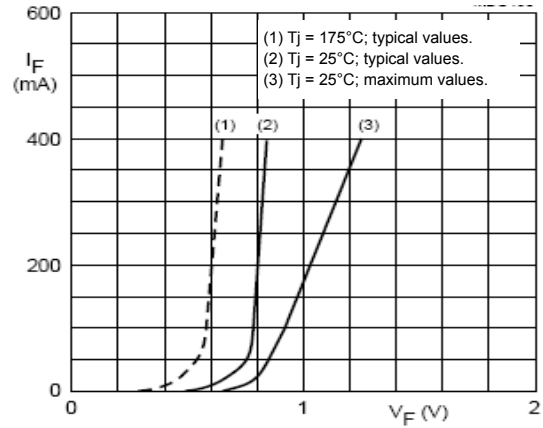
Parameter	Symbol	Test Condition	Min.	Max.	Unit
Reverse Avalanche Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> = 1mA	120	170	V
		I <sub>R</sub> = 0.1mA	120	170	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 90 V	-	100	nA
		V <sub>R</sub> = 90 V, T <sub>j</sub> = 150 °C	-	100	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 400 mA	-	1.25	V
Diode Capacitance	Cd	f = 1MHz ; V <sub>R</sub> = 0	-	35	pF
Reverse Recovery Time	T <sub>rr</sub>	I <sub>F</sub> = 30mA , I <sub>R</sub> = 30mA R <sub>L</sub> = 100 Ω measured at I <sub>R</sub> = 3 mA	-	50	ns

## RATING AND CHARACTERISTIC CURVES ( BAX12, BAX12A )

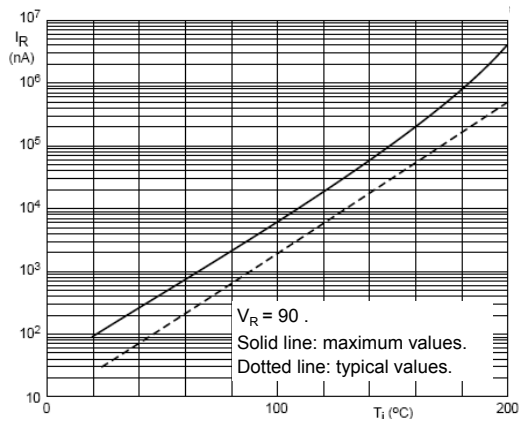
**Fig.1 - Maximum permissible continuous forward current as a function of ambient temperature.**



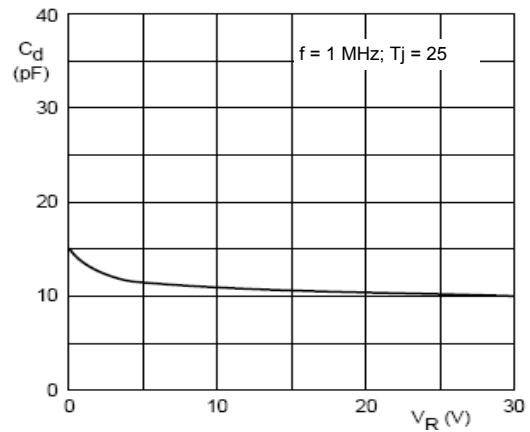
**Fig.2 - Forward current as a function of forward voltage.**



**Fig.3 - Reverse current as a function of junction temperature.**



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



**Fig.5 - Maximum permissible non-repetitive peak forward current as a function of pulse duration.**

