

Features

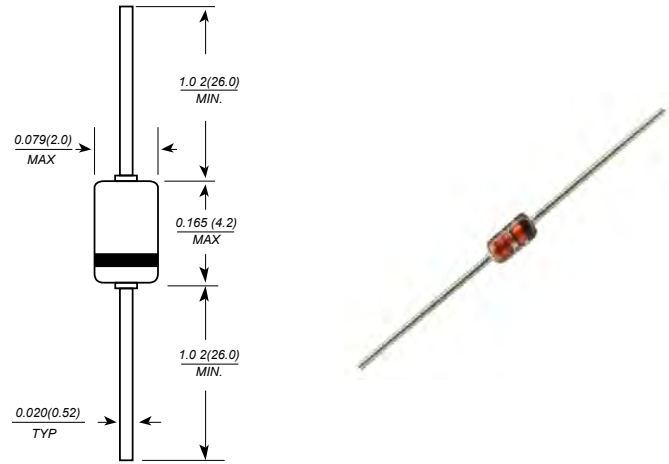
- Switching speed: max. 50 ns
- Continuous reverse voltage: max. 90V
- Repetitive peak reverse voltage: max. 90V
- Repetitive peak forward current: max.800 mA
- Repetitive peak reverse current: max.600mA

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_A = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	90	V
Continuous Reverse Voltage	V _R	90	V
Continuous Forward Current	I _F	400	mA
Repetitive Peak Forward Current	I _{FRM}	800	A
Non-repetitive Peak Forward Current	I _{FSM}	55	A
Square wave: T _j = 25 °C prior to surge		t = 1 μs	
		t = 100 μs	
		9	
Total Power Dissipation , T _a = 25 °C	P _{tot}	450	mW
Repetitive Peak Reverse Current	I _{RRM}	600	mA
Junction Temperature	T _J	200	°C
Storage Temperature Range	T _S	-65 to + 200	°C

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

ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Max.	Unit
Reverse Avalanche Breakdown Voltage	V _{(BR)R}	I _R = 1mA	120	170	V
		I _R = 0.1mA	120	170	V
Reverse Current	I _R	V _R = 90 V	-	100	nA
		V _R = 90 V, T _j = 150 °C	-	100	μA
Forward Voltage	V _F	I _F = 400 mA	-	1.25	V
Diode Capacitance	C _d	f = 1MHz ; V _R = 0	-	35	pF
Reverse Recovery Time	T _{rr}	I _F = 30mA , I _R = 30mA R _L = 100 Ω measured at I _R = 3 mA	-	50	ns

RATING AND CHARACTERISTIC CURVES (BAX12, BAX12A)

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

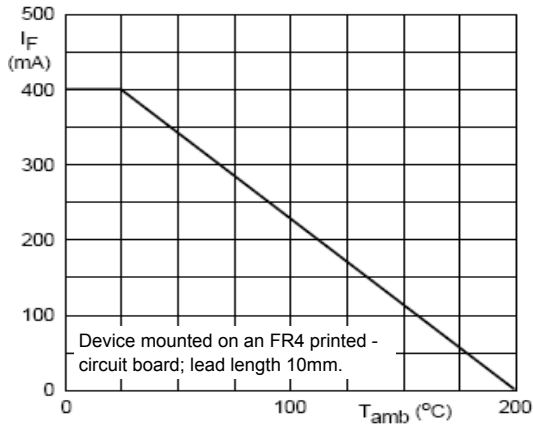


Fig.2 - Forward current as a function of forward voltage.

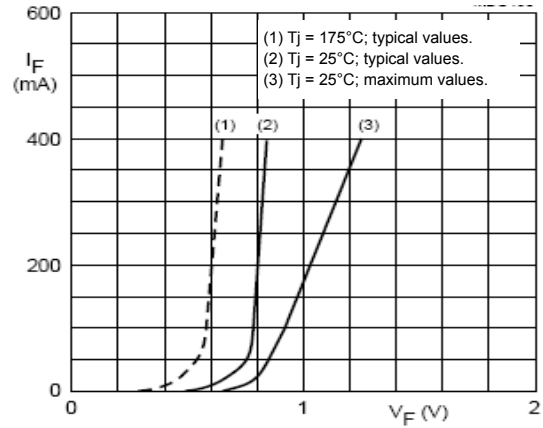


Fig.3 - Reverse current as a function of junction temperature.

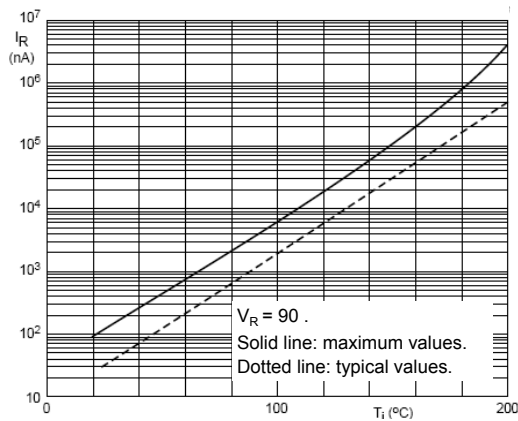


Fig.4 - Diode capacitance as a function of reverse voltage; typical values.

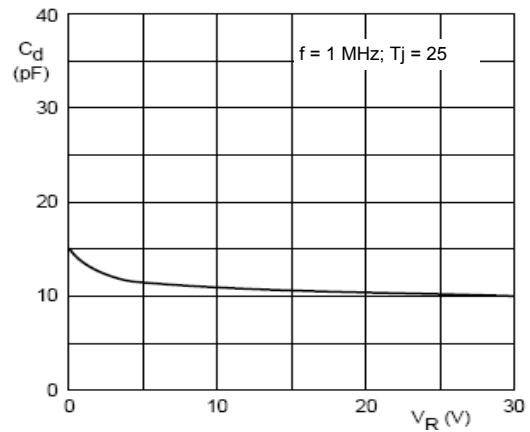


Fig.5 - Maximum permissible non-repetitive peak forward current as a function of pulse duration.

