Silicon - Diode

BA180

10V / 300mA / 500mW

General Purpose Diode

DATASHEET

OEM – Fairchild

Source: Fairchild Databook 1978

Datasheet Rev. 1.3 – 02/19 – data without warranty / liability

BA180 · BA181

GENERAL PURPOSE DIODES

SILICON PLANAR

- **BV . . . 10 V (MIN) @ 100 μA (BA180)**
- **BV . . . 20 V(MIN) @ 100 μA (BA181)**

ABSOLUTE MAXIMUM RATINGS (Note 1)

Temperatures

Storage Temperature Range	−65°C to +200°C
Maximum Junction Operating Temperature	+175°C
Lead Temperature	+260°C

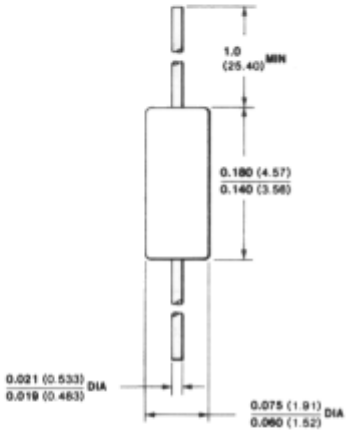
Power Dissipation (Note 2)

Maximum Total Power Dissipation at 25°C Ambient	500 mW
Linear Power Derating Factor (from 25°C)	3.33 mW / °C

Maximum Voltage and Currents

WIV	Working Inverse Voltage	BA180	10 V
		BA181	20 V
I_O	Average Rectified Current		100 mA
I_F	Continuous Forward Current		300 mA
i_f	Peak Repetitive Forward Current		400 mA
i_f (surge)	Peak Forward Surge Current		
	Pulse Width = 1 s		1.0 A
	Pulse Width = 1 μs		4.0 A

DO-35 OUTLINE



NOTES:
Copper clad steel leads, tin plated
Gold plated leads available
Hermetically sealed glass package
Package weight is 0.14 gram

ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC		MIN	MAX	UNITS	TEST CONDITIONS
V_F	Forward Voltage			1.0	V	I_F = 4 mA
I_R	Reverse Current			1.0	μA	V_R = 5.0 V
BV	Breakdown Voltage	BA180	10		V	I_R = 100 μA
		BA181	20		V	I_R = 100 μA

NOTES:
1. These ratings are limiting values above which the serviceability of the diode may be impaired.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty-cycle operation.
3. For product family characteristic curves, refer to Chapter 4, D4.