Silicon - Diode

BA244

15V / 250mW

Bandswitch Diode

DATASHEET

OEM – Fairchild

Source: Fairchild Databook 1978

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

BA243·BA244

BANDSWITCH DIODES

DIFFUSED SILICON PLANAR

- R_S...0.5 Ω (MAX) BA244
- C...2 pF (MAX)

ABSOLUTE MAXIMUM RATINGS (Note 1)

Temperatures

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

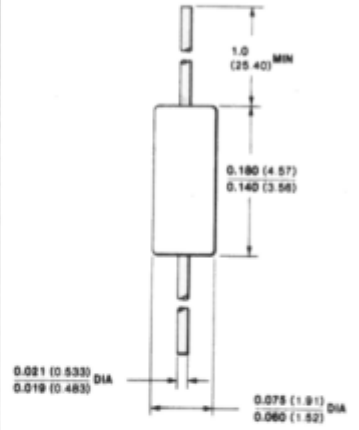
Power Dissipation (Note 2)

Maximum Total Power Dissipation at 25°C Ambient	250 mW
Linear Power Derating Factor (from 25°C)	1.67 mW/°C

Maximum Voltage and Currents

WIV	Working Inverse Voltage	15 V
I_F	Continuous Forward Current	100 mA

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	TYP	MAX	UNITS	TEST CONDITIONS
V_F	Forward Voltage			0.90	1.0	V	I_F = 100 mA
I_R	Reverse Current			5.0 0.05	100 1.0	nA μA	V_R = 15 V V_R = 15 V, T_A = 60°C
BV	Breakdown Voltage		20			V	I_R = 5.0 μA
C	Capacitance			1.7	2.0	pF	V_R = 15 V, f = 1 MHz
$\frac{\Delta C}{C \cdot \Delta V_R}$	Capacitance Variation with Reverse Voltage			1.0		%/V	V_R = 7 − 20 V, f = 1 − 100 MHz, Relative to V_R = 7 V
R_S	Series Resistance	BA243 BA244		0.70 0.40	1.0 0.50	Ω Ω	If = 10 mA, f = 1−100 MHz If = 10 mA, f = 1−100 MHz

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, D7.