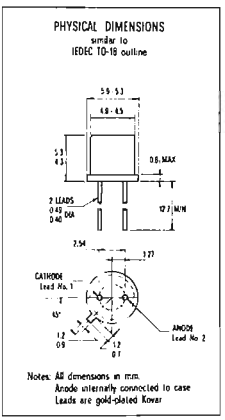
BZX43-BZX44-BZX45

VOLTAGE REFERENCE DIODES

SILICON PLANAR DIODES

GENERAL DESCRIPTION - These SGS - Silicon Planor Diodes ore Temperature Compensated Voltage Reference elements designed for low power opplications. Main features are low temperature coefficient over wide range of temperatures, low dy - namic impedance at 100 µA not obtainable with conventional voltage reference elements, low leakage ot bioses approaching the reference voltage.
For applications where available power is quite low, these devices are exceptional in performances.



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Reference Voltage	6.7 V
Voltage Tolerance	± 5%
Operating Temperature	0°C to 100°C

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
V_Z	Reference Voltage	6.3	6	7.03	V	I_Z = 100 µA
I_R	Reverse Leakage			100	nA	V_R = 5 V
z_z	Dynamic Impedance			750	Ω	I_Z = 100 µA
TC	Temperature Coefficient (BZX 43) (Note 1)			± 0.001	% /°C	I_Z = 100 µA T_C = 0°C to 100°C
TC	Temperature Coefficient (BZX 44) (Note 1)			± 0.002	% /°C	I_Z = 100 µA T_C = 0°C to 100°C
TC	Temperature Coefficient (BZX 45) (Note 1)			± 0.005	% /°C	I_Z = 100 µA T_C = 0°C to 100°C

NOTE :

(1) Temperature coefficient is determined by measuring V_Z at the two temperature extremes and using the following formula.

$$TC = \frac{(V_{T1} - V_{T2})\ 100}{V\,(T_1 - T_2)} \quad \text{where} \quad V = \frac{(V_{T1} + V_{T2})}{2}$$