

1N5772 and 1N6508
JAN, JANTX,
JANTXV
MIL -S-19500/474

Features

- $BV \geq 60\text{ V @ }10\ \mu\text{A}$
- $I_R \leq 100\ \text{nA @ }40\ \text{V}$
- $V_F \leq 1.0\ \text{V @ }100\ \text{mA}$
- $C \dots 8.0\ \text{pF (MAX)}$

Absolute Maximum Ratings (Note 1)

Temperatures

- Storage Temperature Range: -65°C to $+200^\circ\text{C}$
- Maximum Junction Operating Temperature: $+150^\circ\text{C}$
- Lead Temperature: $+260^\circ\text{C}$

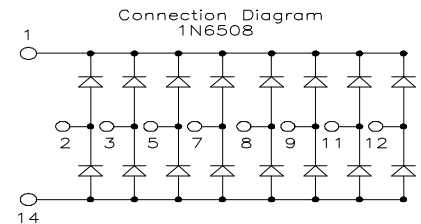
Power Dissipation (Note 2)

- Maximum Dissipation per Junction at 25°C Ambient 400 mW
- Maximum Dissipation per Package at 25°C Ambient 1N5772 - 500 mW
1N6508 - 600 mW
- Linear Derating factor (from 25°C) Junction 3.2 mW / $^\circ\text{C}$
Package 4.0 mW / $^\circ\text{C}$

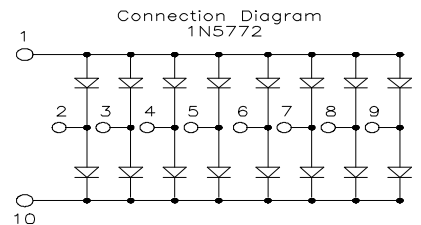
Maximum Voltage and Currents

- I_o Average Rectified Current Per Junction 300 mA
- $I_{f(\text{Surge})}$ Peak Forward Surge Current
Pulse Width = 8.3 ms 500 mA

PLANAR AIR-ISOLATED MONOLITHIC DIODE ARRAYS*



Note: Pins 4, 6, 10, 13
No Internal Connection
See Package Outline TO-116-2



See Package Outline TO-85

Electrical Characteristics (25°C Ambient Temperature unless otherwise noted)

CHARACTERISTIC	SYMBOL	MIN	MAX	UNITS	TEST CONDITIONS
Breakdown Voltage	BV	60		V	$I_R = 10\ \mu\text{A}$
Forward Voltage	V_F		1.0 1.5	V V	$V_F = 100\ \text{mA}$ $V_F = 500\ \text{mA}$
Reverse Current	I_R		100 50	nA μA	$V_R = 40\ \text{V}$ $V_R = 40\ \text{V}, T_A = 150^\circ\text{C}$
Capacitance (Note 3)	C		8.0	pF	$V_R = 0, f = 1.0\ \text{MHz}$
Forward Recovery Time	t_{fr}		40	ns	$I_F = 500\ \text{mA}$
Reverse Recovery Time	t_{rr}		20	ns	$I_F = I_R = 200\ \text{mA}$ $R_L = 100\ \Omega, i_{rr} = 20\ \text{mA}$

Notes!

1. The maximum ratings are limited values above which life satisfactory performance may be impaired.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
3. The capacitance is measured from pin to pin across any one of the diodes. The interaction of other diodes is therefore included in the measured value.

* 16 - DIODE CORE DRIVER MATRIX

