



INTERNATIONAL SEMICONDUCTOR, INC.

16 DIODE, 14 PIN DIP ARRAY

DS2501
Equivalent to:
FSA2501P

ABSOLUTE MAXIMUM RATINGS (Note 1)

TEMPERATURE

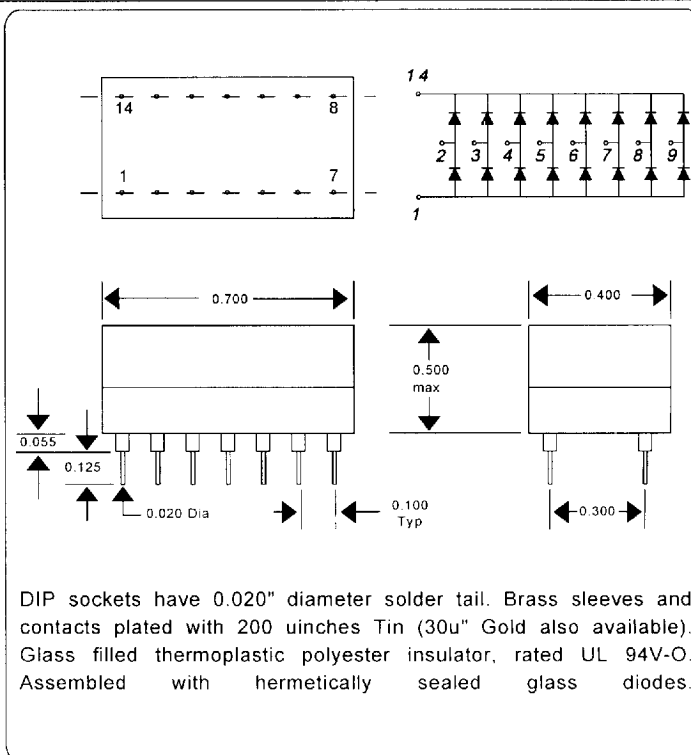
Storage Temperature Range	-55°C to +150°C
Max Junction Operating Temp.	+150°C
Maximum Lead Temperature	+260°C

POWER DISSIPATION (Note 2)

Max Dissipation per Junction at 25°C Ambient	400 mW
Max Dissipation per Package at 25°C.	650 mW
Linear Derating Factor (from 25°C) - Junction	3.2 mW/°C
- Package	6.2 mW/°C

MAXIMUM VOLTAGE and CURRENTS

WIV - Working Inverse Voltage	50 V
I_F - Continuous Forward Current	350 mA
$I_{F(surge)}$ - Peak Forward Surge Current	
- Pulse Width = 1.0 sec.	1.0A
- Pulse Width = 1.0 usec	2.0A



ELECTRICAL CHARACTERISTICS at 25 °C

SYMBOL	CHARACTERISTIC	MIN	MAX	UNITS	TEST CONDITIONS
V_{BR}	Breakdown Voltage	60		V	$I_R=10 \text{ uA}$
V_F	Forward Voltage (Note 3)		1.0 1.1 1.5	V V V	$I_F=100 \text{ mA}$ $I_F=200 \text{ mA}$ $I_F=500 \text{ mA}$
V_F	Forward Voltage Match		15	mV	$I_F=10 \text{ mA}$
I_R	Reverse Current		100 200	nA uA	$V_R=50 \text{ V}, T_A=25^\circ\text{C}$ $V_R=50 \text{ V}, T_A=125^\circ\text{C}$
C	Capacitance (Note 4)		5.0	pF	$V_R=0, f=1.0 \text{ MHz}$
t_{rr}	Forward Recovery Time		40	ns	$I_F=500 \text{ mA}$
V_{FM}	Reverse Recovery Time		10 50	ns ns	$I_F=I_R=10 \text{ mA to } 200 \text{ mA}$ $R_i=100 \text{ ohm}, I_r=0.1 I_R$ $I_F=500 \text{ mA}, I_r=50 \text{ mA}$ $R_i=100 \text{ ohm}, I_r=5.0 \text{ mA}$

Notes:

- These ratings are maximum values, above which life or satisfactory performance may be impaired.
- These are steady state limits.
- V_F is measured using an 8 mA pulse.
- 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.