



# INTERNATIONAL SEMICONDUCTOR, INC. DIODE DIP ARRAYS

## DS2510

Equivalent To:

FSA2510P

MMD1103P

### ABSOLUTE MAXIMUM RATINGS (Note 1)

#### TEMPERATURE

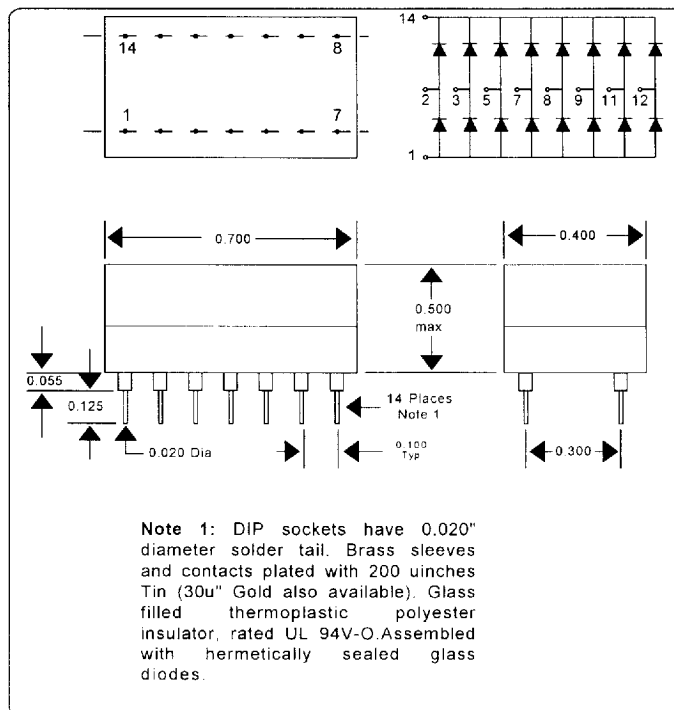
Storage Temperature Range	-55°C to +150°C
Max Junction Operating Temp.	+150°C
Maximum Lead Temperature	+260°C

#### POWER DISSIPATION (Note2)

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	5.2 mW/°C

#### MAXIMUM VOLTAGE and CURRENTS

WIV - Working Inverse Voltage	40 V
I <sub>f</sub> - Continuous Forward Current	350 mA
I <sub>z surge</sub> - Peak Forward Surge Current	
- Pulse Width = 1.0 sec.	1.0A
- Pulse Width = 1.0 usec	2.0A



### ELECTRICAL CHARACTERISTICS at 25 °C

SYMBOL	CHARACTERICTIC	MIN	MAX	UNITS	TEST CONDITIONS
V <sub>BR</sub>	Breakdown Voltage	60		V	I <sub>R</sub> =10 uA
V <sub>F</sub>	Forward Voltage (Note 3)		1.0 1.1 1.3	V V V	I <sub>F</sub> =100 mA I <sub>F</sub> =200 mA I <sub>F</sub> =500 mA
V <sub>F</sub>	Forward Voltage Match		15	mV	I <sub>F</sub> =10 mA
I <sub>R</sub>	Reverse Current		100 100	nA uA	V <sub>R</sub> =40 V, T <sub>A</sub> = 25°C V <sub>R</sub> =40 V, T <sub>A</sub> =125°C
C	Capacitance (Note 4)		3.0	pF	I <sub>F</sub> =500 mA
t <sub>rr</sub>	Forward Recovery Time		40	ns	V <sub>R</sub> =0, f=1.0 MHz
t <sub>rr</sub>	Reverse Recovery Time		10 50	ns ns	IF=IR=10 mA to 200 mA, R <sub>i</sub> =100 ohms, I <sub>rr</sub> =0.1I <sub>R</sub> IF=500 mA, Ir=50 mA, R <sub>i</sub> =100 ohms, I <sub>rr</sub> =5.0 mA

#### Notes:

1. These ratings are maximum values, above which life or satisfactory performance may be impaired.
2. These are steady state limits.
3. V<sub>F</sub> is measured using an 8 mA pulse.
4. The capacitance is measured from pin to pin across any one of the diodes. The interaction of othe diodes is therefore included in the measured value.