

PROTEK[®] DEVICES

PMMAD SERIES

STEERING DIODE ARRAYS

APPLICATIONS

- ✓ High Frequency Data Lines
- ✓ RS-232 & RS-422 Interface Networks
- ✓ Ethernet: 10 Base T
- ✓ Computer I/O Ports

IEC COMPATIBILITY (EN61000-4)

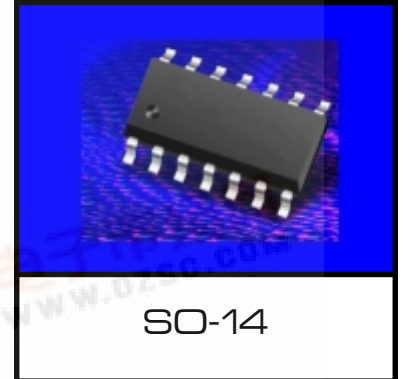
- ✓ 61000-4-2 (ESD): Air - 15kv, Contact - 8kw
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 24A, 8/20 μ s

FEATURES

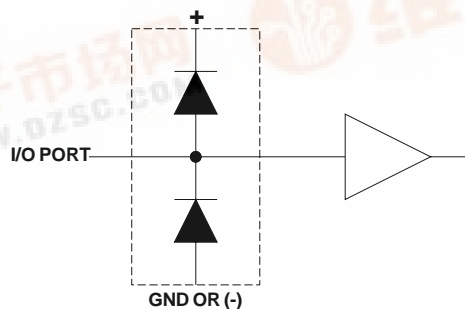
- ✓ 500 Milliwatt Continuous Power Dissipation
- ✓ ESD Protection > 40 kilovolts
- ✓ Designed for Bus Voltage Protection
- ✓ Working Voltage > 50 Volts
- ✓ **LOW CAPACITANCE 5pF PER DIODE**

MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-14 Package
- ✓ Weight 0.15 grams (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ Tape and Reel Per EIA Standard 481-1-A
- ✓ Marking: Logo, Part Number & Pin Number 1 Indicated By Dot on Top of Package



CIRCUIT DIAGRAM

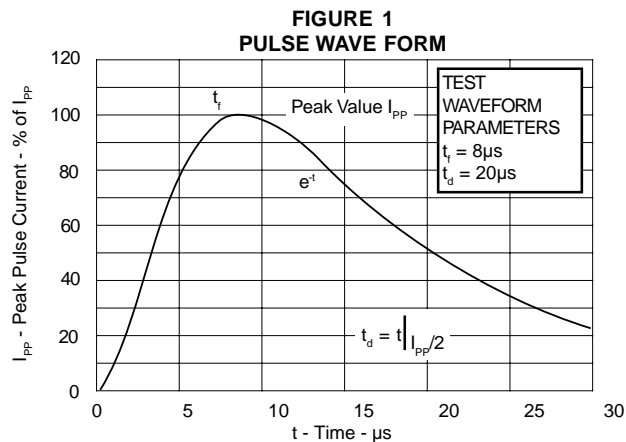


DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Continuous Power Dissipation	P_{PK}	500	Milliwatts
Continuous Forward Current (Single Diode)	I_F	400	mA
Repetitive Peak Forward Current @ $t_p=5\mu s$, $F=50kHz$	I_{FRM}	700	mA
Operating Temperature	T_J	-55°C to 150°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified					
PART NUMBER	REPETITIVE PEAK PULSE VOLTAGE @ 10 μA V_{RRM} VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT @ 40V I_R μA	FORWARD PEAK PULSE CURRENT @ 8/20 μs I_{FM} AMPS	MAXIMUM FORWARD VOLTAGE @ 100mA V_F VOLTS	MAXIMUM CAPACITANCE (Per Diode) @ 4V, 1 MHz pF
See Note 1	50	0.1	40	1.2	5

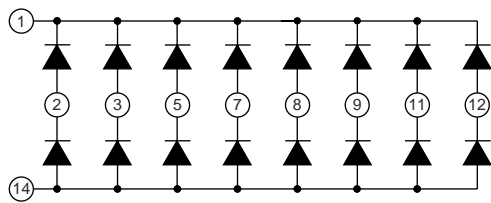
Note 1: Device types include: PMMAD130, PMMAD1103, PMMAD1105, PMMAD1106, PMMAD1107 and PMMAD1109. Electrical characteristics apply to all device types.



PMMAD SERIES

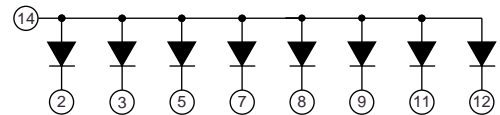
PIN CONFIGURATIONS

MMAD1103



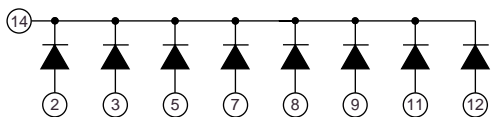
14 DIODE ARRAY
NC PINS 4, 6, 10 & 13

MMAD1106



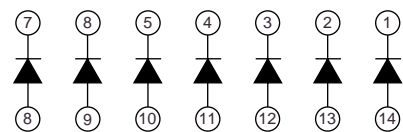
8 DIODE COMMON ANODE ARRAY
NC PIN 1, 4, 6, 10 & 13

MMAD1105



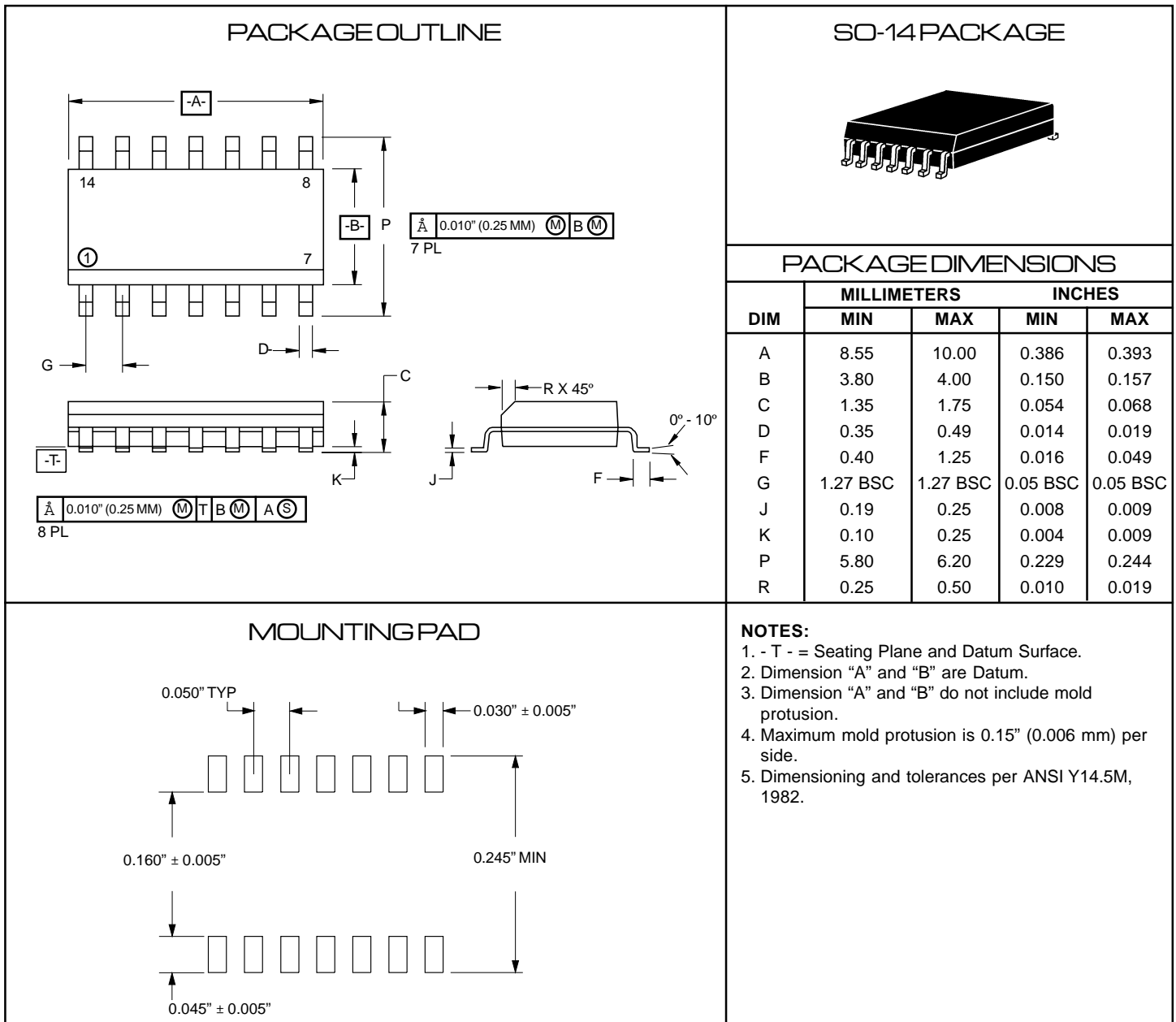
8 DIODE COMMON CATHODE ARRAY
NC PINS 1, 4, 6, 10 & 13

MMAD1109



7 ISOLATED DIODE ARRAY
(INDEPENDENT)

PACKAGE OUTLINE & DIMENSIONS



TAPE & REEL PACKAGING:

Surface mount product is taped and reeled in accordance with EIA-481, reel quantities and sizes are as follows:

7 Inch Reel - 1,000 pieces per reel; 13 Inch Reel - 2,500 pieces per reel

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