

STEERING DIODE ARRAY

APPLICATIONS

- ✓ High Frequency Data Lines
- ✓ RS-232 & RS-422 Interface Networks
- ✓ Ethernet - 10/100 Base T
- ✓ Computer I/O Ports

IEC COMPATIBILITY (EN61000-4)

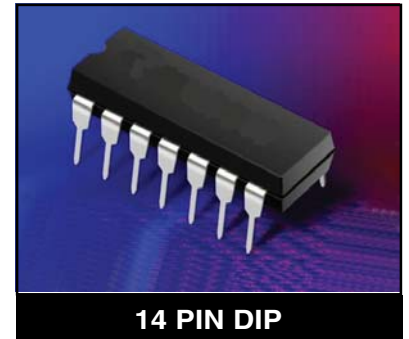
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 24A, 8/20 μ s Level 2(Line-Ground) & Level 3(Line-Line)

FEATURES

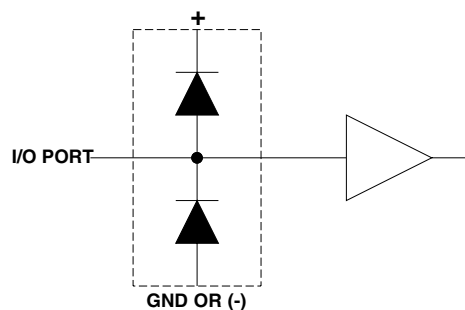
- ✓ 500 Milliwatt Continuous Power Dissipation
- ✓ ESD Protection > 40 kilovolts
- ✓ Monolithic Design
- ✓ Provides Protection for 7-8 I/O Lines
- ✓ Working Voltage > 50 Volts
- ✓ Low Leakage Current < 0.1 μ A
- ✓ Ultra Low Capacitance: 5pF Per Diode
- ✓ ROHS Compliant

MECHANICAL CHARACTERISTICS

- ✓ Molded 14 Pin Dual-In-Line (DIP) Package
- ✓ Weight 1.2 grams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- ✓ Flammability Rating UL 94V-0
- ✓ Consult Factory for Leaded Device Availability
- ✓ Packaging: 25 Pieces Per Tube
- ✓ Marking: Logo, Part Number, Date Code & Pin One Defined By Dot on Top of Package



PIN CONFIGURATION



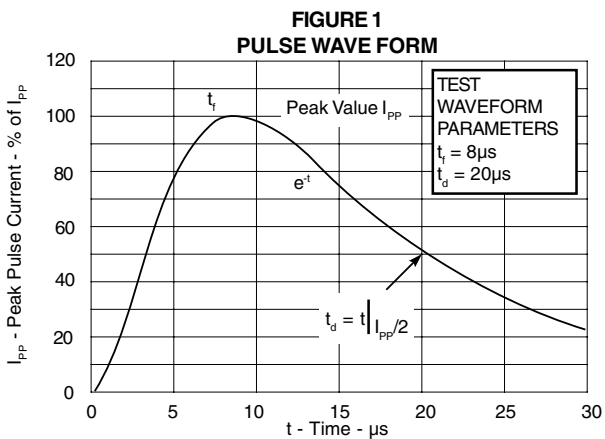
PMAD SERIES

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_P	400	mA
Repetitive Peak Forward Current @ $t_p = 5\mu s$, $F = 50kHz$	I_{FRM}	700	mA
Operating Temperature	T_A	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

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

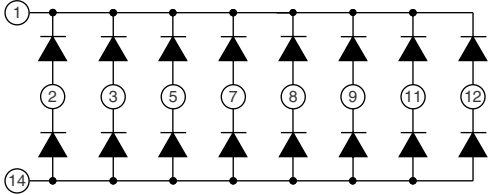
Note 1: Device types include: PMAD130, PMAD1105, PMAD1106 and PMAD1109. Electrical characteristics apply to all device types.



PMAD SERIES

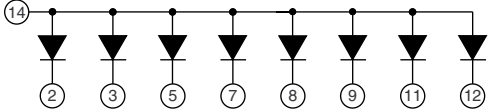
PIN CONFIGURATIONS

PMAD1103



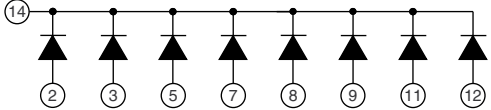
16 DIODE ARRAY
NC PINS 4, 6, 10 & 13
8 LINES OF PROTECTION

PMAD1106



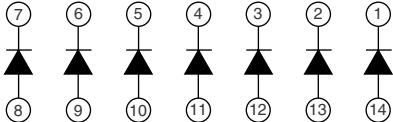
8 DIODE COMMON ANODE ARRAY
NC PIN 1, 4, 6, 10 & 13
8 LINES OF PROTECTION

PMAD1105



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

PMAD1109



**7 ISOLATED DIODE ARRAY
(INDEPENDENT)**
7 LINES OF PROTECTION

PMAD SERIES

14 PIN DIP PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE

14 PIN DIP

DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	-	19.1	-	0.750
B	6.10	6.60	0.240	0.260
C	7.37	7.87	0.290	0.310
D	0.25	0.50	0.010	0.020
E	0°	10°	0°	10°
F	0.51	-	0.020	-
G	-	5.08	-	0.200
H	3.17	-	0.125	-
I	-	1.78	-	0.070
J	0.84 TYP	0.84 TYP	0.033 TYP	0.033 TYP
K	0.38	0.53	0.015	0.021
L	2.54 TYP	2.54 TYP	0.100 TYP	0.100 TYP

NOTES

- Dimensions are exclusive of mold flash and metal burrs.

BULK ORDERING NOMENCLATURE

- No Suffix = Product Shipped in Tubes of 25 pcs per Tube.
- Suffix -LF = Lead-Free, Pure-Tin Plating, i.e., *PMAD1109-LF*.

Outline & Dimensions: Rev 1 - 11/01, 06002

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