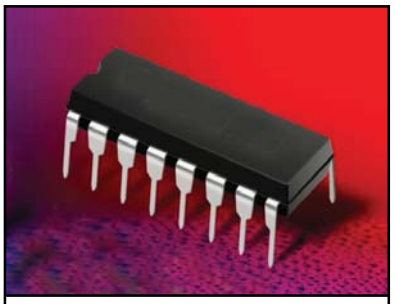
PROTEK DEVICES
Only One Name Means ProTek'Tion™

PMAD1108

STEERING DIODE ARRAY

APPLICATIONS

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



16 PIN DIP

IEC COMPATIBILITY (EN61000-4)

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

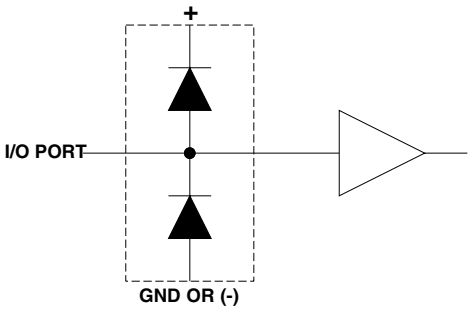
FEATURES

✔ 500 Milliwatt Continuous Power Dissipation
✔ ESD Protection > 40 kilovolts
✔ Provides Protection for 8 I/O Lines
✔ Working Voltage > 50 Volts
✔ Low Insertion Loss & Cross-talk
✔ ***LOW LEAKAGE CURRENT < 0.1µA***
✔ ***ULTRA LOW CAPACITANCE: 5pF Per Diode***
✔ RoHS Compliant on Lead-Free Versions

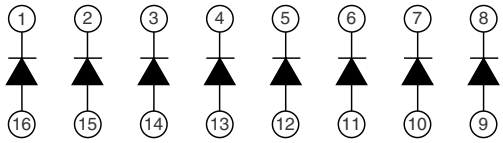
MECHANICAL CHARACTERISTICS

✔ Molded 16 Pin Dual-In-Line (DIP) Package
✔ Available in Tin-Lead or Lead-Free Pure-Tin Plating(Annealed)
✔ Solder Reflow Temperature:
  Tin-Lead - Sn/Pb, 85/15: 240-245°C
  Pure-Tin - Sn, 100: 260-270°C
✔ Weight 1.2 grams (Approximate)
✔ Flammability Rating UL 94V-0
✔ Packaging: 25 Pieces Per Tube
✔ Marking: Logo, Part Number, Date Code & Pin One Defined By Dot on Top of Package

CIRCUIT DIAGRAM



PIN CONFIGURATION



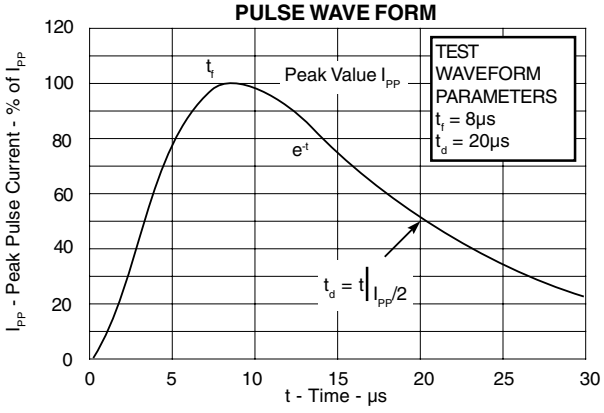
8 ISOLATED DIODE ARRAY
8 LINES OF PROTECTION

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=5µs, 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

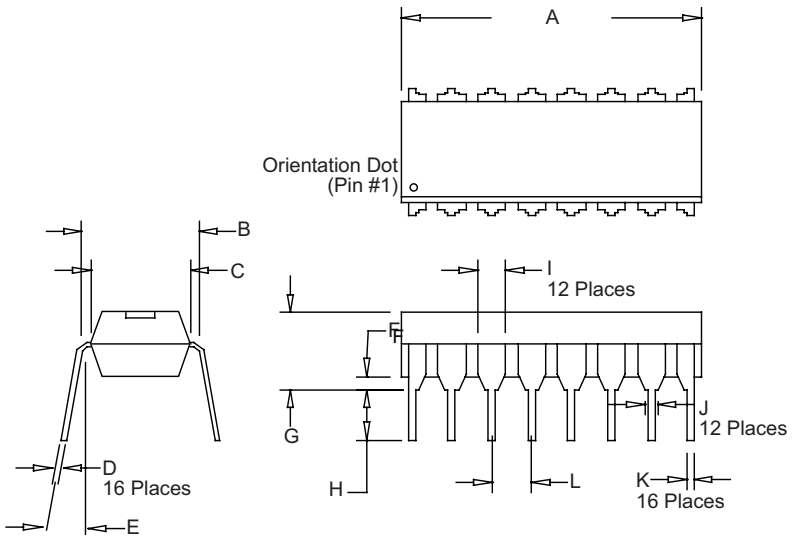
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified					
PART NUMBER	REPETITIVE PEAK REVERSE VOLTAGE @ 10µA V_{RRM} VOLTS	MAXIMUM FORWARD PEAK PULSE CURRENT @ 8/20µs I_{FM} AMPS	MAXIMUM FORWARD VOLTAGE @ 100mA V_F VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT V_{RRM} @ 40V I_R µA	MAXIMUM CAPACITANCE (Per Diode) @ 4V, 1 MHz C_j pF
PMAD1108	50	40	1.2	0.1	5

FIGURE 1
PULSE WAVE FORM

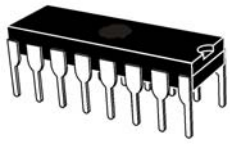


PACKAGE OUTLINE & DIMENSIONS

PACKAGE OUTLINE



16 PIN DIP



DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	-	19.8	-	0.780
B	7.37	7.87	0.290	0.310
C	6.10	6.60	0.240	0.260
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:
1. Dimensions are exclusive of mold flash and metal burrs.

BULK ORDERING NOMENCLATURE:
1. No Suffix = Product Shipped in Tubes of 25 pcs per Tube.
2. Suffix - LF = Lead-Free, Pure-Tin Plating, i.e., *PMAD1108-LF.*

Outline & Dimensions: Rev 1 - 11/01, 06003

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