

EMI FILTER/TVS ARRAY**APPLICATIONS**

- ✓ Cellular Phones
- ✓ Color LCD Display Panel
- ✓ Notebooks
- ✓ Personal Digital Assistant (PDA)
- ✓ Ground Positioning System (GPS)
- ✓ SMART Cards

IEC COMPATIBILITY (EN61000-4)

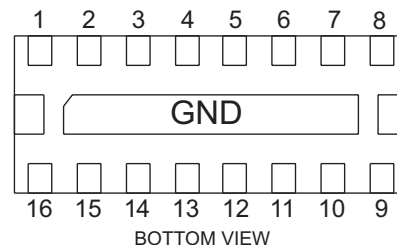
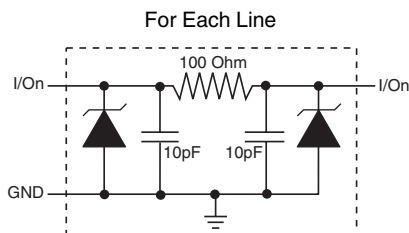
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns

FEATURES

- ✓ ESD Protection > 25 kilovolts
- ✓ Bidirectional EMI Filtering/TVS Low Pass Filters
- ✓ Protects Up to Eight(8) Data Lines
- ✓ RoHS Compliant in Lead-Free Versions

MECHANICAL CHARACTERISTICS

- ✓ DFN-16 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
- ✓ Flammability rating UL 94V-0
- ✓ Lead-Free Finishing Available
- ✓ Device Marking: Marking Code
- ✓ 12mm Tape and Reel Per EIA Standard 481

**PIN CONFIGURATION**

Note: I/O connected from pins 1-16, 2-15, 3-14, 5-12, 6-11, 7-10 and 8-9.

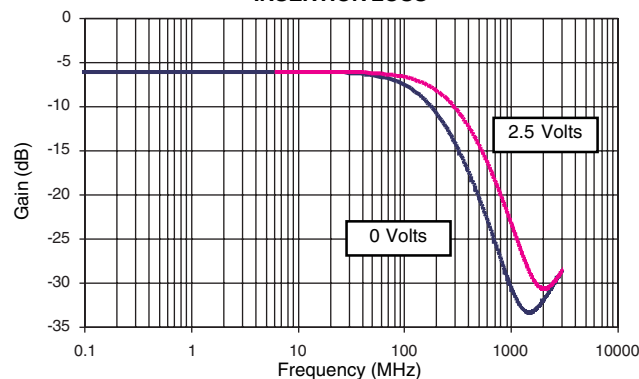
DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	T_J	-40°C to 85°C	°C
Storage Temperature	T_{STG}	-55°C to 150°C	°C
DC Power Per Resistor	P	100	mW
Typical Resistance @ $\pm 15\%$	R	100	OHMS

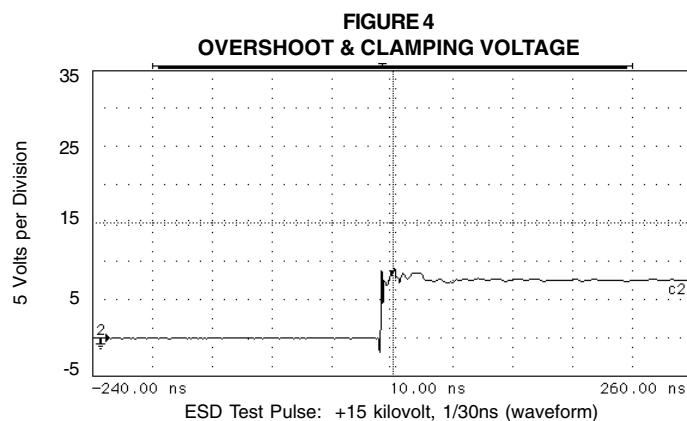
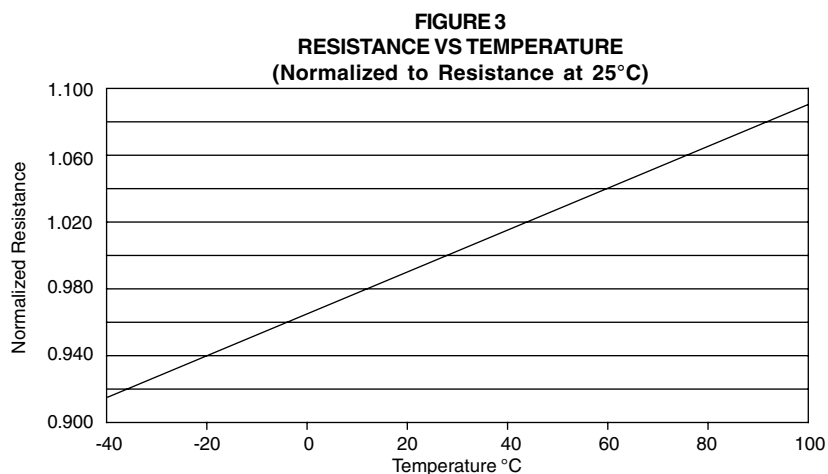
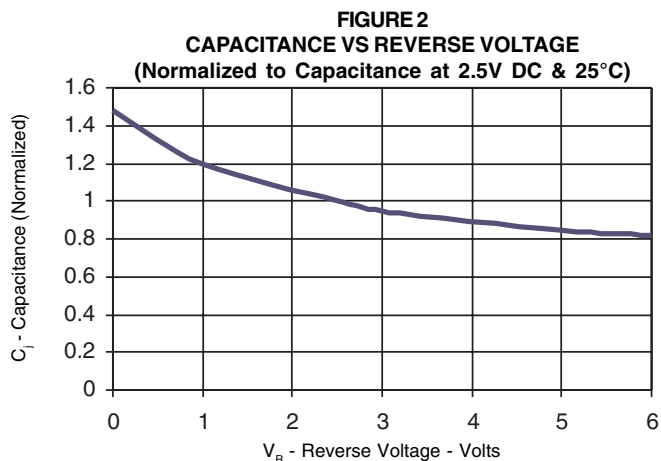
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified								
PART NUMBER	DEVICE MARKING	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT	TYPICAL FORWARD VOLTAGE	MINIMUM ATTENUATION	CUT-OFF FREQUENCY (50 OHMS I/O) ZERO BIAS	TYPICAL CAPACITANCE PER LINE (See Note 1)
		V_{WM} VOLTS	@ 1mA $V_{(BR)}$ VOLTS	@ 3V I_D μA	@ 10mA V_F VOLTS	@ 800-3000 MHz dB	f_c MHz	@ 2.5V, 1MHz C pF
EM8D-100L	M8D 10L	5.0	6.0	0.1	0.8	25	150	20

Note 1: $\pm 20\%$ tolerance.

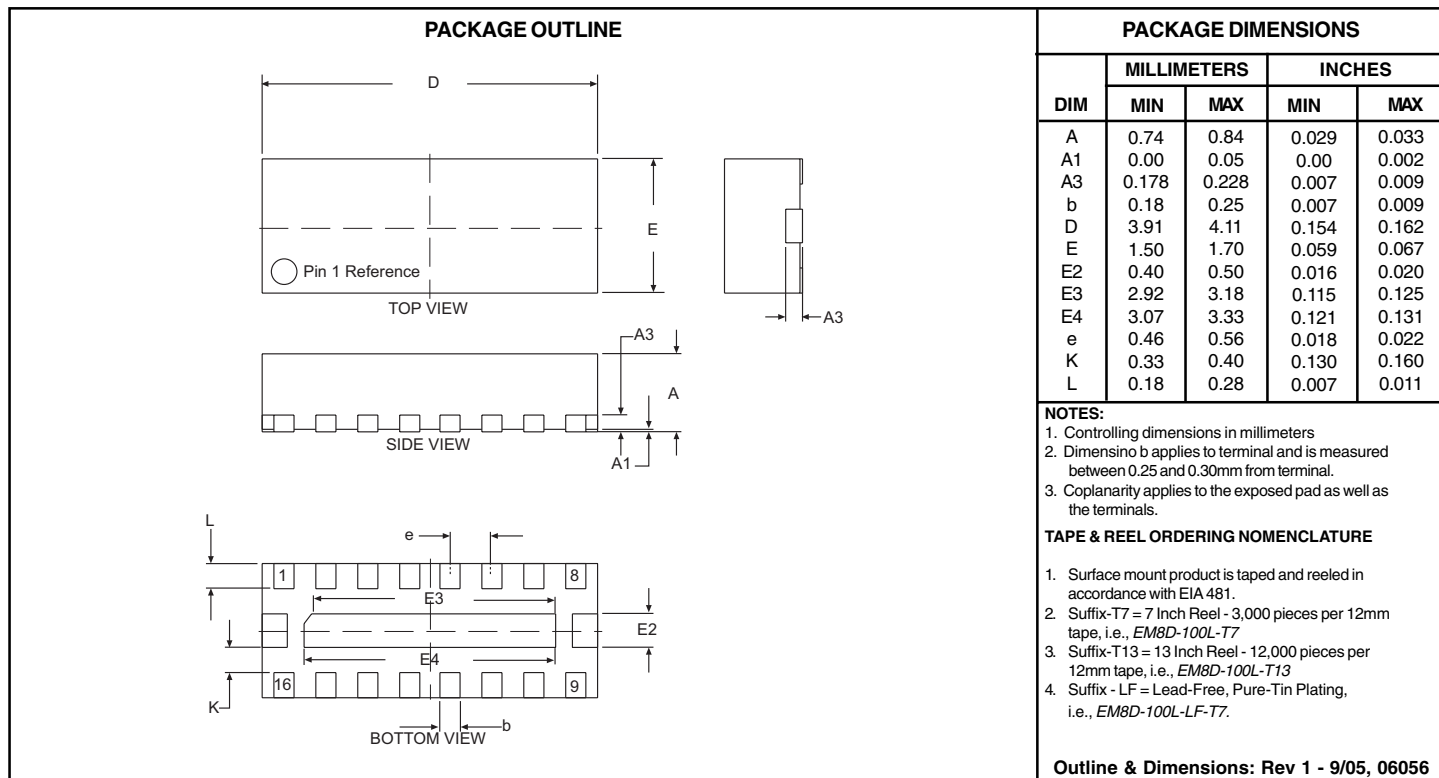
**FIGURE 1
INSERTION LOSS**



GRAPHS

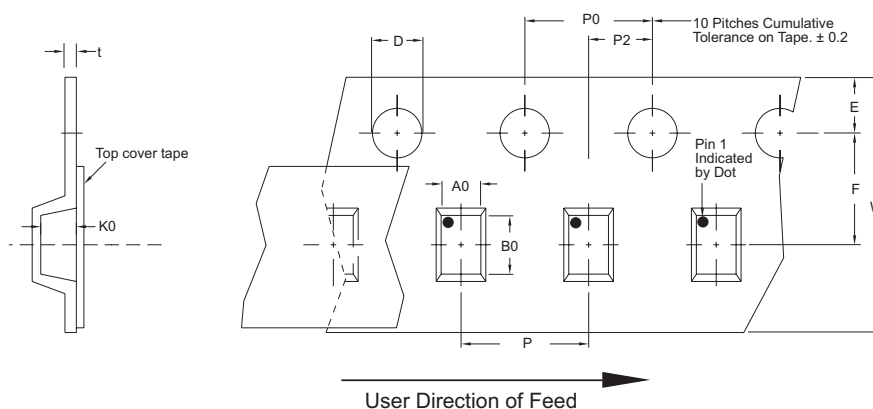


PACKAGE OUTLINE & DIMENSIONS



Tape & Reel Specifications (Dimensions in millimeters)

Reel Dia.	Tape Width	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")/330mm(13")	12mm	1.9± 0.10	4.30± 0.10	1.00 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	12.00 ±0.30	4.00 ±0.10	2.00 ±0.05	4.00 ±0.10	0.25



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ProTek Devices

2929 South Fair Lane, Tempe, AZ 85282

Tel: 602-431-8101 Fax: 602-431-2288

E-Mail: sales@protekdevices.com

Web Site: www.protekdevices.com