

**BIDIRECTIONAL DATA LINE PROTECTOR**

**DESCRIPTION**

The GS-P8-A and GS-P8-E are Bidirectional Data Line Protection systems against EOS (Electrical Over Stress) and ESD (Electrical Static Discharge).

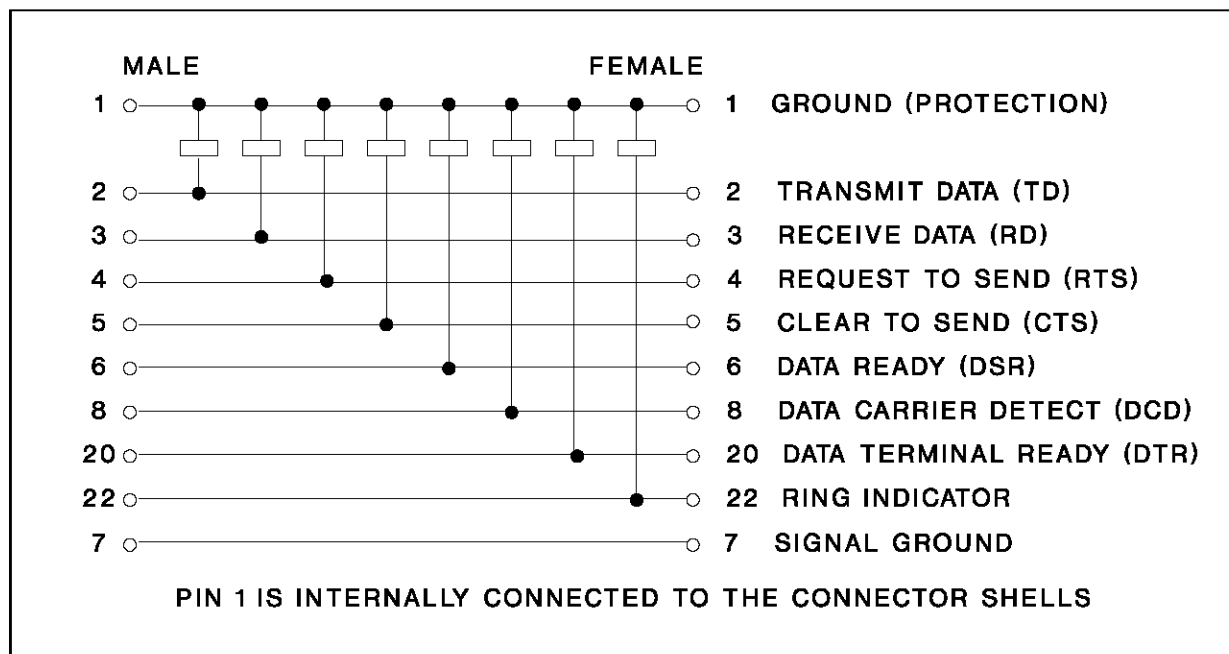
These subminiature male/female connector, designed both for EIA RS232C and V24 with 8 lines, shunts to ground hazardous overvoltages induced on an EIA cable.



**ORDERING TYPE NUMBER**

Type	Description
GS-P8-A	American version (female screws (4.40 UNC)
GS-P8-E	European version (female screws M3)

**Figure 1. Block diagram of GS-P8-A and GS-P8-E**



**ELECTRICAL CHARACTERISTICS** ( $T_{amb} = 25^{\circ}\text{C}$  unless otherwise specified 8/20 $\mu\text{s}$  pulse waveform)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V <sub>rm</sub>	Stand-off voltage	Pin 2, 4, 20		± 6		V
V <sub>rm</sub>	Stand-off voltage	Pin 3, 5, 6, 8, 22		± 24		V
V <sub>br</sub>	Breakdown voltage	Pin 2, 4, 20 $I_r = 10 \text{ mA}$	± 7,7			V
V <sub>br</sub>	Breakdown voltage	Pin 3, 5, 6, 8, 22 $I_r = 1 \text{ mA}$	± 24			V
V <sub>cl</sub>	Clamping Voltage	Pin 2, 4, 20 $I_{pp} = 40\text{A}$			± 12	V
V <sub>cl</sub>	Clamping Voltage	Pin 3, 5, 6, 8, 22 $I_{pp} = 40\text{A}$			± 35	V
P <sub>p</sub>	Peak Power Rating	Pin 2, 4, 20	500			W
P <sub>p</sub>	Peak Power Rating	Pin 3, 5, 6, 8, 22	800			W
I <sub>rm</sub>	Leakage Current	Pin 2, 4, 20 $V_{rm} = \pm 6\text{V}$			25	$\mu\text{A}$
I <sub>rm</sub>	Leakage Current	Pin 3, 5, 6, 8, 22 $V_{rm} = \pm 24\text{V}$			5	$\mu\text{A}$
C	Input Capacitance	All pins to pin 1,7 5V bias			680	pF
T <sub>stg</sub>	Storage Temperature Range		-55		+125	$^{\circ}\text{C}$
T <sub>op</sub>	Operating Temperature Range		-40		+60	$^{\circ}\text{C}$

Figure 2: Symbols definition

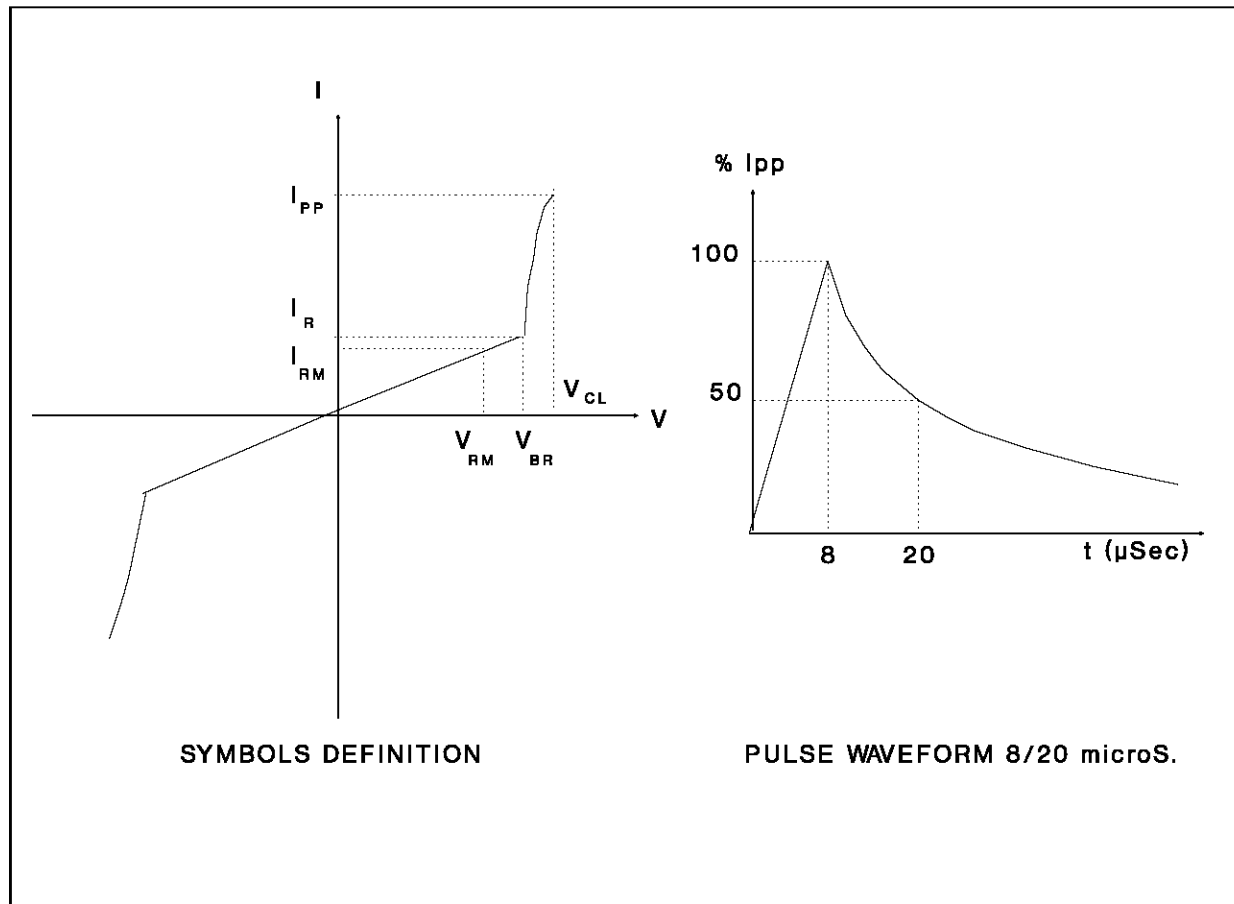
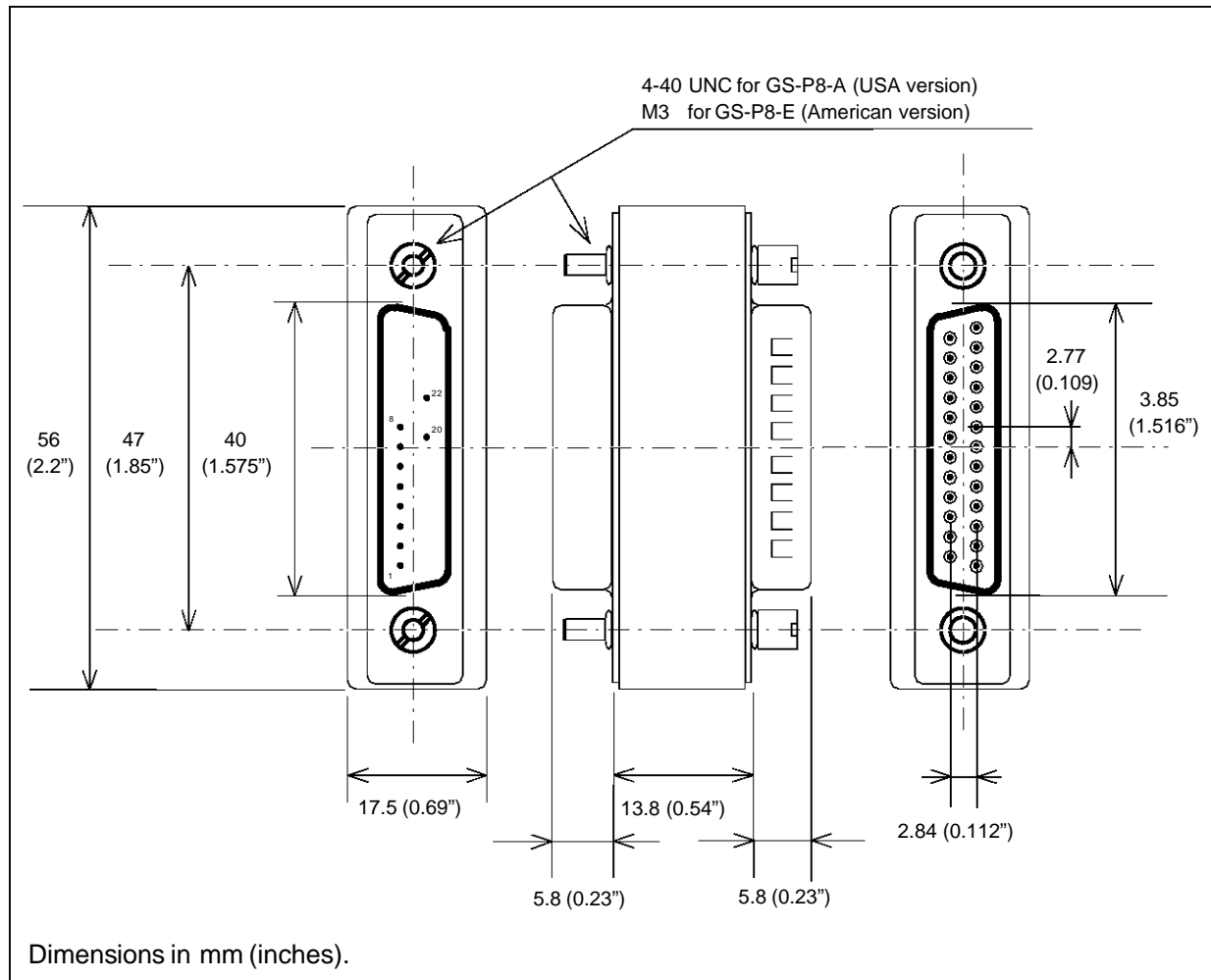


Figure 3.



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