SGS-THOMSON MICROELECTRONICS

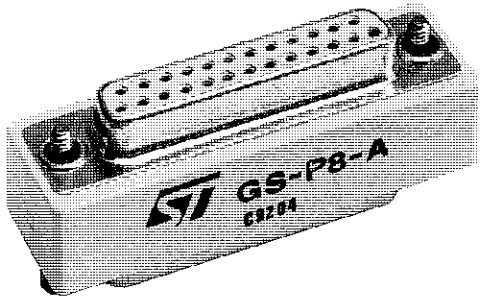
GS-P8-A
GS-P8-E

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).

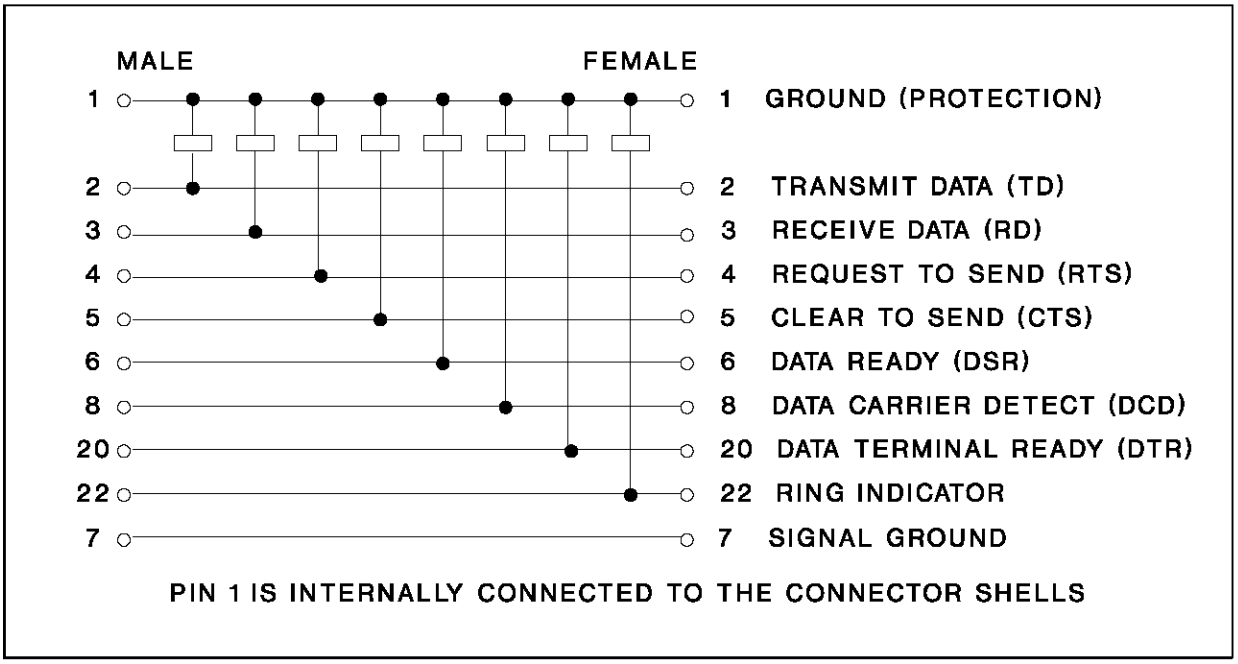
These subminiature male/female connector, designed both for EIA RS232C and V24 with 8 lines, shunts to ground hazardous overvoltages induced on an EIA cable.



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°C unless otherwise specified 8/20µS pulse waveform)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vrm	Stand-off voltage	Pin 2, 4, 20		± 6		V
Vrm	Stand-off voltage	Pin 3, 5, 6, 8, 22		± 24		V
Vbr	Breakdown voltage	Pin 2, 4, 20 Ir = 10 mA	± 7,7			V
Vbr	Breakdown voltage	Pin 3, 5, 6, 8, 22 Ir = 1 mA	± 24			V
Vcl	Clamping Voltage	Pin 2, 4, 20 Ipp = 40A			± 12	V
Vcl	Clamping Voltage	Pin 3, 5, 6, 8, 22 Ipp = 40A			± 35	V
Pp	Peak Power Rating	Pin 2, 4, 20	500			W
Pp	Peak Power Rating	Pin 3, 5, 6, 8, 22	800			W
Irm	Leakage Current	Pin 2, 4, 20 Vrm = ± 6V			25	µA
Irm	Leakage Current	Pin 3, 5, 6, 8, 22 Vrm = ± 24V			5	µA
C	Input Capacitance	All pins to pin 1,7 5V bias			680	pF
Tstg	Storage Temperature Range		-55		+125	°C
Top	Operating Temperature Range		-40		+60	°C

Figure 2: Symbols definition

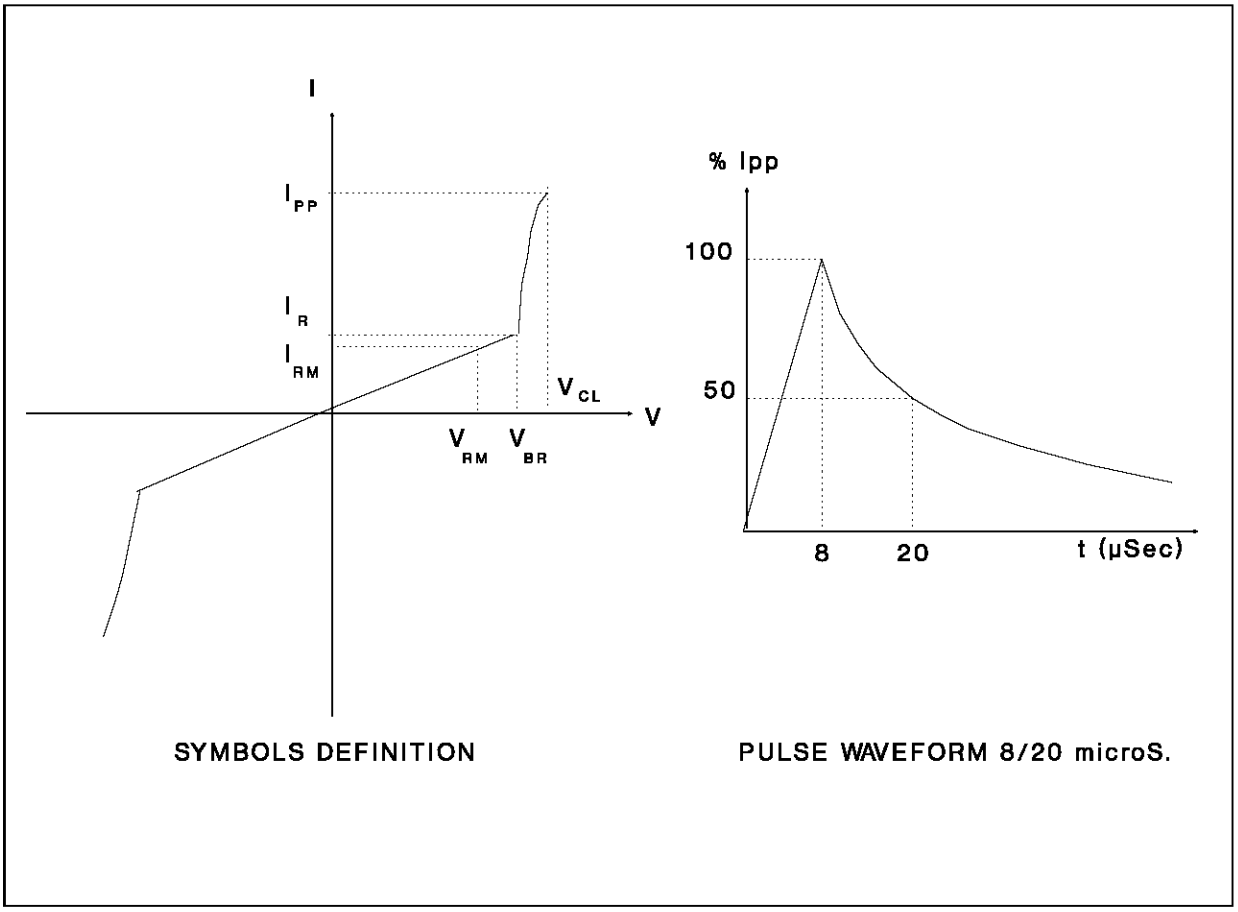
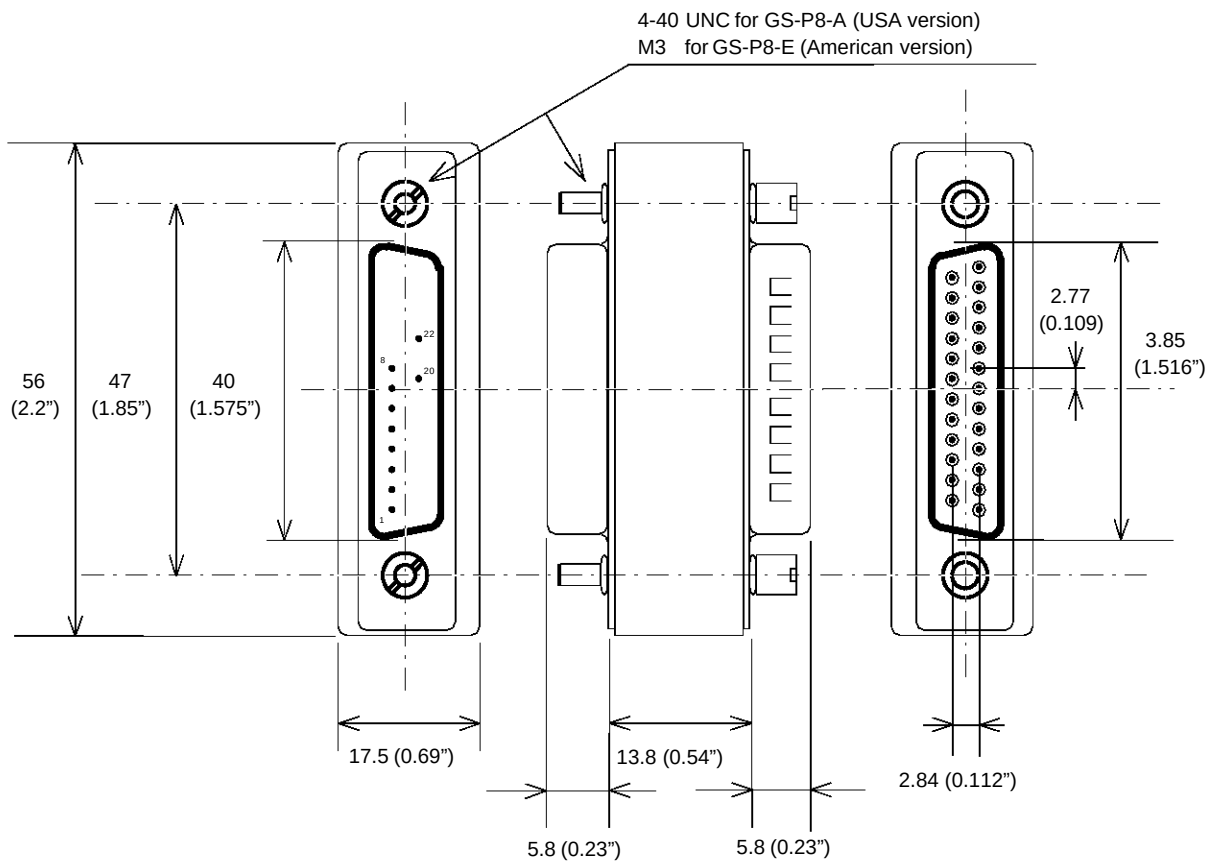


Figure 3.



Dimensions in mm (inches).