# OVER-VOLTAGE SUPPRESSION UNIT MODEL OV-4887 E1

For E1 Data Rates

### PRODUCT DESCRIPTION AND INSTALLATION DETAILS

#### **ACA PERMIT**

Design Two Thousand Pty Ltd ACA Supplier's Code N468

## **DESCRIPTION**

The OV-4887 E1 is an over-voltage suppression unit used to protect switches and all elements upstream from (and including) the terminal equipment (CEPT digital telephony networks) should dangerous voltages be accidentally imposed by faulty equipment or wiring. The OV-4887 E1 is an electrical safety barrier.

The Over-Voltage Suppression card PC-4887 is used to protect the Tx and Rx pairs of a 2Mbps link from improper voltages such as mains 240Vac rms. This voltage may originate either from connected equipment or its data path cabling. Connections are made via two RJ45 sockets identified as 'Equip' and 'Switch' ('Line') and a MANDATORY earth connector.

The OV-4887 card complies with AS3260 1998 Appendix G where less than 3.5mA rms of earth leakage current can flow when all four 'Equipment' wires are connected simultaneously to 240V ac rms (which would be the worst case fault condition).

The OV-4887 E1 is also available in a multi-port rack version. Up to 10 cards may be fitted into a two unit high 19 inch half depth rack mounting case. In this configuration, the RJ45 connectors are accessible from the front while a screw terminal on the back panel provides a group earth.

The OV-4887 E1 120 $\Omega$  clamping circuits are transparent to data transmitted between 1.544 and 10Mbps.

In summary, the OV-4887 E1 guards against dangerous voltages being passed from Customer Equipment to a digital network (and vice versa). In doing so it reduces the risk of electric shock to persons should dangerous voltages be accidentally imposed from the Customer (terminal) equipment.

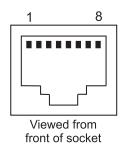
Please Note: The OV-4887 can also be ordered for 100Mbps 100 Ohm circuits (ie. Ethernet).

## **CONNECTION**

## **Picture**



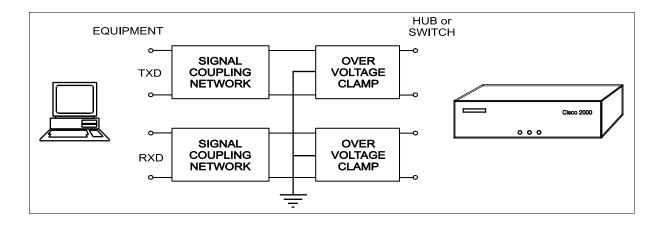
Equipment (SK1)	TXD +	Pair 3	Pin 1
	TXD -	(T568A)	Pin 2
	RXD+	Pair 2	Pin 3
	RXD-	(T568A)	Pin 6
Switch (Line) (SK2)	TXD +	Pair 3	Pin 1
	TXD -	(T568A)	Pin 2
	RXD +	Pair 2	Pin 3
	RXD -	(T568A)	Pin 6



# **Earth Connection**

Connect the Earth wire to a suitable ground point.

### **BLOCK DIAGRAM OF THE OV-4887**



### **PART NUMBERS**

OV-4887 E1 RA-4795 PC-4887 2Mbps 4W 2Mbps Over-Voltage Suppression Unit – Stand-alone LI-2782BRE 2RU 19" Sub-rack 4W 2Mbps Over-Voltage Suppression Card

Designed and Manufactured in Australia



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N468

