## ISDN S-INTERFACE MODULES Surface Mount, Dual, 1500 Vrms



Module Selection Guide		
IC Manufacturer	IC Part Number	Pulse Part Number
Siemens	PEB2080/2081/2084/2085/2086 PSB 2186	T5049NL
	PSB 21381/21382/21383/21384	

#### **Definition of Terms**

Ratio: This is the turns ratio, expressed as "Primary:Secondary". The term "CT" designates a center-tapped

winding.

OCL: Open Circuit Inductance, measured 20 kHz, 100 mV.

**L<sub>L</sub> Sec:** Leakage Inductance measured across the primary with the respective secondary winding short-circuited.

**C**<sub>W/W</sub>: Winding capacitance, formed by the primary and secondary wire. These wires form the "Plates" of this

capacitor. Measured at 100 kHz, 20 mV.

**CD Pri:** This is the distributed capacitance.

**DCR:** This is the resistance of the windings when measured in DC conditions.

 $\Delta$  **lpc:** The maximum specified unbalanced DC current capability of the device.

The minimum primary inductance and the maximum distributed capacitance satisfy the transmitter output and receiver input impedance requirements of CCITT I.430 for both TE and NT.

The maximum distributed capacitance allows sufficient margin for the capacitance of the IC and a protection diode network. It is consistent with the overall maximum value specified and permitted length of the basic access TE cord.

Flammability – Materials used in the products are recognized UL94-VO. Products meet the requirements of IEC 695-2-2 (needle flame test).

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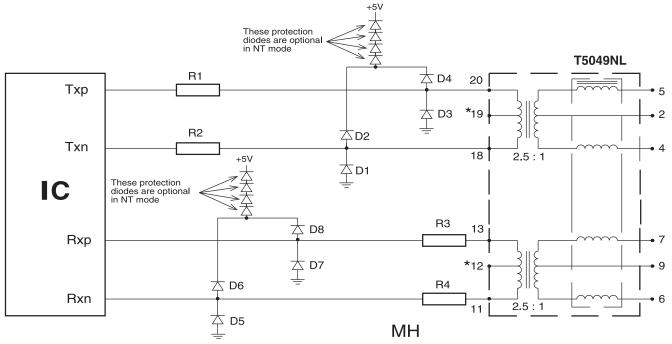


### **Application Notes**

The S-Interface is the standardized four wire digital telephone access point defined by the CCITT I-Series recommendations for the Integrated Service Digital Network. This "basic rate access" accommodates two 64 Kbps "B-channels" for information, one 16 Kbps "D-channel" intended

for signaling and control, and 48 Kbps for framing and other purposes, giving a total rate of 192 Kbps. The CCITT physical layer recommends that the user network interface be transformer coupled as shown in our typical application notes.

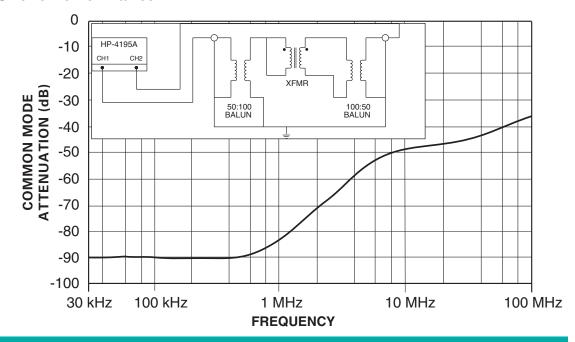
## Typical S-Interface Application Circuit for Motorola MC145574



<sup>\*</sup>NOTE: Refer to Silicon Vendors' Application Notes for more details on power supply connection and specific component values.

#### **Common Mode Choke Performance**

Typical Common Mode Attenuation for the high-frequency Common Mode Choke (470 μH) based on a 50 Ω system.



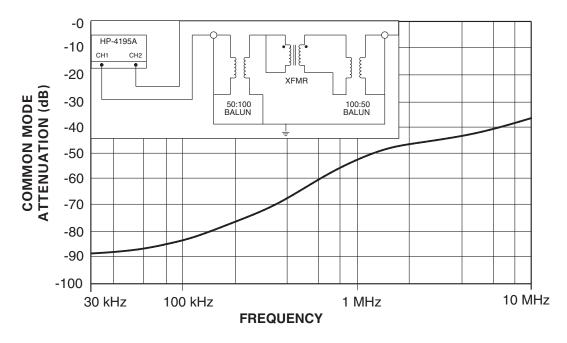
USA 858 674 8100 ● Germany 49 7032 7806 0 ● Singapore 65 6287 8998 ● Shanghai 86 21 62787060 ● China 86 755 33966678 ● Taiwan 886 3 4356768

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## **Common Mode Choke Performance** (continued)

Typical Common Mode Attenuation for the low-frequency Common Mode Choke (4.7 mH), based on a 50  $\Omega$  system.



#### **For More Information:**

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