

**TR909 DLC/FLC SLIC with Low Power Standby**

The HC5513 is a subscriber line interface circuit which is interchangeable with Ericsson's PBL3764 for distributed central office applications. Enhancements include immunity to circuit latch-up during hot plug and absence of false signaling in the presence of longitudinal currents.

The HC5513 is fabricated in a High Voltage Dielectrically Isolated (DI) Bipolar Process that eliminates leakage currents and device latch-up problems normally associated with Junction Isolated (JI) ICs. The elimination of the leakage currents results in improved circuit performance for wide temperature extremes. The latch free benefit of the DI xprocess guarantees operation under adverse transient conditions. This process feature makes the HC5513 ideally suited for use in harsh outdoor environments.

**Ordering Information**

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
HC5513BIM	-40 to 85	28 Ld PLCC	N28.45
HC5513BIP	-40 to 85	22 Ld PDIP	E22.4

**Features**

- DI Monolithic High Voltage Process
- Programmable Current Feed (20mA to 60mA)
- Programmable Loop Current Detector Threshold and Battery Feed Characteristics
- Ground Key and Ring Trip Detection
- Compatible with Ericsson's PBL3764
- Thermal Shutdown
- On-Hook Transmission
- Wide Battery Voltage Range (-24V to -58V)
- Low Standby Power
- Meets TR-NWT-000057 Transmission Requirements
- -40°C to 85°C Ambient Temperature Range

**Applications**

- Digital Loop Carrier Systems . . . . . • Pair Gain
- Fiber-In-The-Loop ONUs . . . . . • POTS
- Wireless Local Loop . . . . . • PABX
- Hybrid Fiber Coax
- Related Literature
  - AN9537, Operation of the HC5513/26 Evaluation Board

**Block Diagram**

