



**MOTOROLA**

**TCA3385**

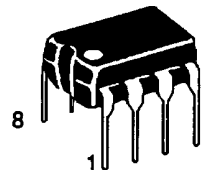
*Advance Information*

# Telephone ring signal converter

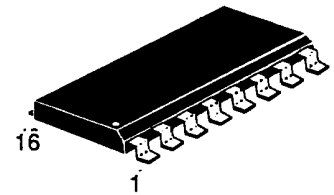
The TCA3385 is a high efficiency telephone ring signal converter designed for use with the TCA3386 (it can also be used stand-alone). These devices, together with a microprocessor, form the basis for a high-performance feature telephone set.

The circuit includes a switching regulator which converts the ring signal from the telephone line into a DC supply signal suitable for powering the other devices in the telephone, e.g. TCA3386 and the MPU, during the ringing phase.

- High efficiency step-down DC/DC converter with linear input impedance
- Power derived from rectified AC ring signal or DC voltage
- Drive output for external PNP transistor
- System supply voltage determined by external transistor, coils and diodes
- Two modes of operation: fixed internal or programmable ring detect threshold (7 to 35V)
- Programmable input impedance between 3K and 15Kohms
- Ring detect output for microprocessor
- Lightning and mains protection
- Applications: telephone set, answering machine, home appliance, etc....



**DP suffix**  
Plastic package  
Case 626



**FP suffix**  
Plastic package  
Case 751G

**Ordering information**  
TCA3385-DP Plastic DIP  
TCA3385-FP SO Package

## Block diagram and typical application circuit

