TCM1703
POLARITY PROTECTION BRIDGE

T-75-07-90

Features

- Provides up to 25% more DC power than conventional diode bridge.
- Low current loss.
- Low voltage drop.
- Disabling capability.

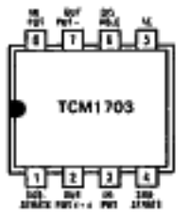
Description

The TCM1703 polarity protection bridge is an integrated circuit designed using standard linear technology. The circuit utilizes saturating transistors instead of silicon diodes, thus providing up to 25% more DC power than the conventional circuit.
The TCM1703 has a low voltage drop (0.4V @ 10 mA) and low current loss (1 mA @ 10 mA), making it ideal for applications with low voltage drop requirements.

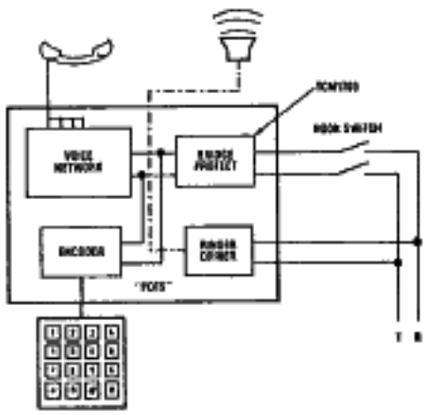
Absolute maximum ratings

I_{IDC} Maximum input DC current . . . . . 120 mA
I_{Ip} Peak input current (pulse duration < 3 ms) . . . 1 A
V_{IDC} Maximum input DC voltage . . . . . 14 V
V_{Ip} Peak input voltage (pulse duration < 3 ms) . 16 V
T_{stg} Storage temperature . . . . . −65°C to 150°C
T_{op} Operating temperature range . . . . −25°C to 70°C

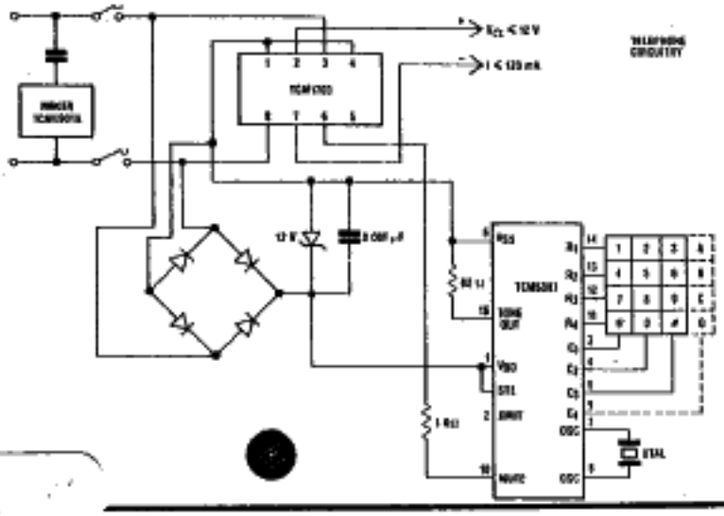
TCM1703 pin configuration



Subscriber terminal basic telephone



TCM1703 very low DC voltage telephone set



ADVANCE INFORMATION
This document contains information on a new product. Specifications are subject to change without notice.

TEXAS INSTRUMENTS