



ELECTRONICS, INC.

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NTE1249 Integrated Circuit Balanced Modulator

Description:

The NTE1249 is a balanced modulator circuit in a 7-Lead SIP type package designed for use in SSB CB equipment.

Features:

- Low Operating Voltage
- High Carrier Suppression

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Supply Voltage, V_{CC}	14.4V
Supply Current, I_{CC}	15mA
Power Dissipation, P_D	22mW
Operating Ambient Temperature Range, T_{opr}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	I_{tot}	$V_6 = 12V$	6.5	9.5	12.5	mA
Zener Voltage	V_{5-4}		–	6.15	–	V
Signal Input Terminal Voltage	V_{1-4}		–	3.1	–	V
Carrier Input Terminal Voltage	V_{3-4}		–	3.4	–	V
Output Terminal Voltage	V_{7-4}		–	8.6	–	V
BM AC Output Voltage	$V_{O(BM)}$	$V_6 = 9V$	–6	–3	0	dBm
Carrier Suppression	SC		40	50	–	dB

Pin Connection Diagram
(Front View)

