



**ABSOLUTE MAXIMUM RATINGS<sup>1</sup>** (T<sub>CASE</sub>= 30 °C)

SYMBOLS	PARAMETERS	UNITS	RATINGS
V <sub>DD</sub>	Supply Voltage	V	30
V <sub>i</sub>	Input Voltage <sup>2</sup>	dBmV	65
T <sub>c</sub>	Operating Case Temperature	°C	-30 to +100
T <sub>STG</sub>	Storage Temperature	°C	-40 to +100

Note:

1. Operation in excess of any one of these parameters may result in permanent damage.
2. Maximum single channel power applied to the input for 1 minute with no measurable degradation in performance.

**RECOMMENDED OPERATING CONDITIONS**

(Z<sub>S</sub>= Z<sub>L</sub>= 75Ω)

SYMBOLS	PARAMETERS	UNITS	MIN	TYP	MAX
V <sub>DD</sub>	Supply Voltage	V	23.5	24.0	24.5
V <sub>i</sub>	Input Voltage <sup>1</sup>				
	MC-7842	dBmV	-	27.0	31.5
	MC-7843	dBmV	-	25.0	29.5
T <sub>c</sub>	Operating Case Temperature	°C	-30	+25	+85

Note:

1. Test Condition: 110 channels, 10 dB tilted across the band.

**NOTES ON CORRECT USE**

1. The space between PC board and root of the lead should be kept more than 1 mm to prevent undesired stress on the lead and also should be kept less than 4 mm to prevent undesired parasitic inductance.

Recommended space is 2.0 to 3.0 mm typical.

2. Recommended torque strength of the screw is 59 to 78 Ncm.
3. Form the ground pattern as wide as possible to minimize ground impedance. (to prevent undesired oscillation)

All the ground pins must be connected together with wide ground pattern to decrease impedance difference.

Life Support Applications

These NEC products are not intended for use in life support devices, appliances, or systems where the malfunction of these products can reasonably be expected to result in personal injury. The customers of CEL using or selling these products for use in such applications do so at their own risk and agree to fully indemnify CEL for all damages resulting from such improper use or sale.

**RECOMMENDED SOLDERING CONDITIONS**

This product should be soldered in the following recommended conditions. Other soldering methods and conditions than the recommended conditions are to be consulted with our sales representatives.

Soldering Method	Soldering Conditions	Condition Symbol
Pin Part Heating	Pin area temperature: less than 260°C <sup>1</sup> Hour: Within 2 sec./pin	-

Note.

1. The point of pin part heating must be kept at a distance of more than 1.2 mm from the root of lead.

EXCLUSIVE NORTH AMERICAN AGENT FOR **NEC** RF, MICROWAVE & OPTOELECTRONIC SEMICONDUCTORS

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