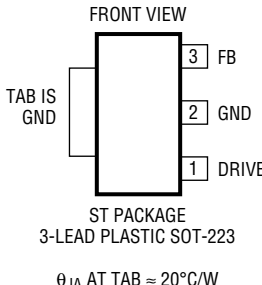


The specifications for the **LT1123CST** are identical to those of the **LT1123CZ**.

For complete specifications, typical performance curves and applications information, please see the **LT1123** data sheet.

PACKAGE/ORDER INFORMATION

	ORDER PART NUMBER
	LT1123CST
	PART MARKING
	1123

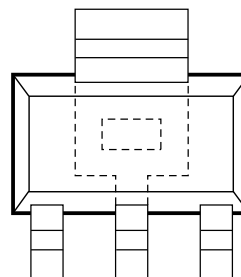
For the LT1123 the tab is ground so that plated through holes can be used to couple the tab both electrically and thermally to the ground plane layer of the board. This will help to lower the thermal resistance.

SOLDERING METHODS

The SOT-223 is manufactured with gull wing leadform for surface mount applications. The leads and heat sink are solder plated and allow easy soldering using nonactive or mildly active fluxes. The package is constructed with three leads exiting one side of the package and one heat sink exiting the other side, and the die attached to the heat sink internally.

The recommended methods of soldering SOT-223 are: vapor phase reflow and infrared reflow with preheat of component to within 65°C of the solder temperature. Hand soldering and wave soldering are not recommended since these methods can easily damage the part with excessive thermal gradients across the package.

Care must be exercised during surface mount to minimize large (> 30°C per second) thermal shock to the package.



1123/SN

The SOT223 package is designed to be surface mounted. Heat sinking is accomplished by using the heat spreading capabilities of the PC board and its copper traces. The thermal resistance from junction to ambient can be as low as 50°C/W. This requires a reasonably sized PC board with at least one layer of copper to spread the heat across the board and couple it into the surrounding air.

The table below can be used as a guideline in estimating thermal resistance. Data for the table was generated using 1/16" FR-4 board with 1oz copper foil.

Table 1.

Copper Area		Board Area	Thermal Resistance (Junction to Ambient)
Topside*	Backside		
2500 sq. mm	2500 sq. mm	2500 sq. mm	50°C/W
1000 sq. mm	2500 sq. mm	2500 sq. mm	50°C/W
225 sq. mm	2500 sq. mm	2500 sq. mm	58°C/W
100 sq. mm	2500 sq. mm	2500 sq. mm	64°C/W
1000 sq. mm	1000 sq. mm	1000 sq. mm	57°C/W
1000 sq. mm	0	1000 sq. mm	60°C/W

* Tab of device attached to topside copper

For further information regarding this specification notice contact:

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