PRODUCT DATA

Micro International, Inc

PART NUMBER

LDT3251A and LDT3251AT

Micro-LID PNP Transistor

Micro International, Inc.
179-204 Belle Forrest Circle
Nashville, TN 37221

Tel: 615-662-1200 Fax 615-662-1226

www.microlid.com sales@microlid.com

Micro-LID Transistors
LDT3251A and LDT3251AT

Description:

The LDT3251A (untinned) and LDT3251AT (tinned) are PNP silicon transistors in very small, rugged, surface mount, 4-post ceramic packages (Micro International manufactured package p/n 4-075-1). The LDT3251A and LDT3251AT meet the general specifications of the 2N3251A transistor. The 4-075-1 Micro-LID package is a 4-post, leadless ceramic carrier which can be provided with gold metallized or pre-tinned lands, and is approved for military, medical implant, sensor, and high reliability applications. The LDT3251A and LDT3251AT can be provided with special feature options such as additional temperature cycling and screening.

Maximum Ratings:

Parameter	Symbol	Rating
Collector-Base Voltage	Vcbo	50 V
Collector-Emitter Voltage	Vceo	40 V
Emitter-Base Voltage	Vebo	5 V
Collector Current	Ic	200 mA
Total Dissipation	Pt	350 mW
Operating Junction Temperature	Tj	150°C
Storage Temperature	Tstg	-65°C to 150°C
Operating Temperature	Toper	-55°C to 125°C

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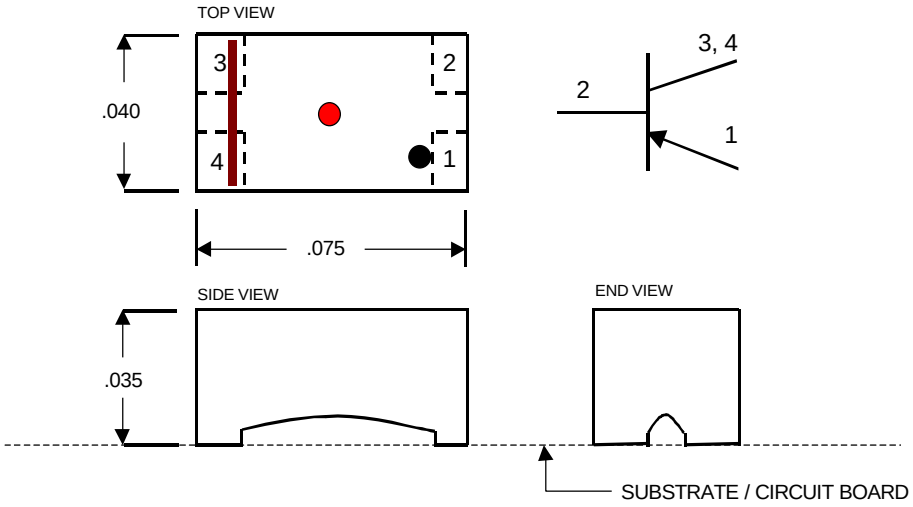
Outline / Schematic:



Dimensions / Marking:

Length	.075″ ± .003″	Post 1 (Emitter)	.015″ x .010″ typ
Width	.040″ ± .003″	Post 2 (Base)	.015″ x .010″ typ
Height	.035″ ± .003″	Post 3,4 (Collector)	.015″ x .012″ typ

Marking on back of package : Brown Stripe over Collector, Black Dot over Emitter and Red Dot in Center
(post down configuration) (post down configuration)

Standard In-Process Screening Requirements:

- Semiconductor die and Micro-LID package visual inspection
- Wire pull test
- 24 hour stabilization bake at 150°C
- 10 temperature cycles from –55°C to 125°C
- 100% electrical test of dc characteristics at 25°C
- Final visual inspection

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Electrical Characteristics (25°C Ambient)

Parameter	Symbol	Min	Typ	Max	Units
Collector-Base Breakdown Ic = 10 uA, Ie = 0	BVcbo	50	--	--	V
Collector-Emitter Breakdown* Ib = 0, Ic = 10 mA	BVceo	40	--	--	V
Emitter-Base Breakdown Ic = 0, Ie = 10 uA	BVebo	5	--	--	V
Collector-Base Cutoff Current Vcb = 40 V	Icbo	--	--	100	nA
DC Forward Current Gain* Ic = 10 mA, Vce = 1 V	Hfe	100		300	
Collector-Emitter Saturation Ic = 10 mA, Ib = 15 mA	Vce (sat)	--	--	.25	V
Base-Emitter Saturation Ic = 10 mA, Ib = 15 mA	Vbe (sat)	--	--	.9	V
Collector Capacitance Vcb = 10 V, Ie = 0 f = 1 MHz	Cobo	--	--	4.5	pF

* Pulse test, pulse width $\leq$ 300 usec, duty cycle $\leq$ 2%