CXT5401

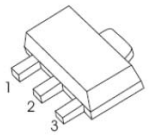
Surface Mount PNP Silicon Transistor

■ Features

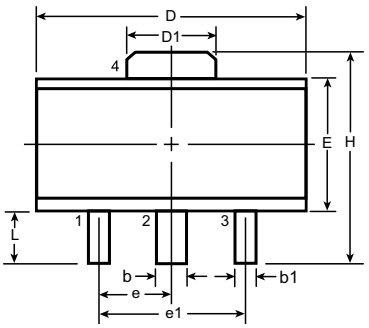
- High current (max. 500mA).
- Low voltage (max. 150 V).

SOT-89-3L

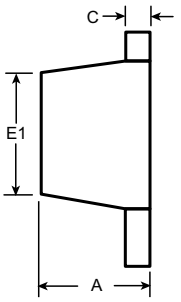
1. BASE
2. COLLECTOR
3. EMITTER



SOT-89 PACKAGE OUTLINE



Top View



Side View

Symbol		A	b	b1	C	D	D1	E	E1	e	e1	H	L
Dimensions (mm)	MIN	1.40	0.44	0.36	0.3	4.40	1.50	2.29	2.00†	1.50 BSC	3.00 BSC	3.94	0.89
	NOM	-	-	-	-	-	-	-	-			-	-
	MAX	1.60	0.56	0.48	0.5	4.60	1.75	2.60	2.29			4.25	1.20

Dimensions in mm

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-160	V
Collector-emitter voltage	V_{CEO}	-150	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current (DC)	I_C	-500	mA
power dissipation	P_D	1.2	W
thermal resistance Junction- to-ambient	$R_{\theta JA}$	104	℃/W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-65 to +150	℃

CXT5401

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	V_{CBO}	I_C=-100μA	-160			V
Collector to emitter breakdown voltage	V_{CEO}	I_C=-1.0mA	-150			V
Emitter to base breakdown voltage	V_{EBO}	I_E=-10μA	-5.0			V
Collector cutoff current	I_{CBO}	V_{CB} =- 120 V, I_E = 0			-50	nA
		V_{CB} =- 120 V, T_A=100℃			-50	μA
DC current gain	h_{FE}	I_C = -1.0 mA; V_{CE} = -5.0 V	50			
		I_C = -10mA; V_{CE} =- 5.0V	60		240	
		I_C = -50 mA; V_{CE} = -5.0V	50			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C =- 10 mA; I_B = -1.0mA			-0.2	V
		I_C = -50 mA; I_B = -5.0mA			-0.5	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = -10 mA; I_B = -1.0mA			-1.0	V
		I_C = -50 mA; I_B =- 5.0mA			-1.0	V
Output capacitance	C_{ob}	V_{CB} =-10 V, I_E = 0,f=1.0MHz			6.0	pF
Transition frequency	f_T	I_C = -10 mA; V_{CE} =-10V; f = 100 MHz	100		300	MHz

RATING AND CHARACTERISTIC CURVES (CXT5401)

