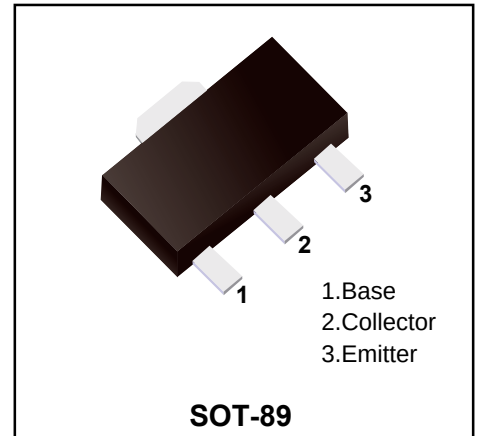


Plastic-Encapsulate Transistors

TRANSISTOR(PNP)

FEATURES

- ◆ Switching and amplification in high voltage
- ◆ Applications such as telephony
- ◆ Low current(max. 500mA)
- ◆ High voltage(max.160V)



Marking Code	
CXT5401SI	5401

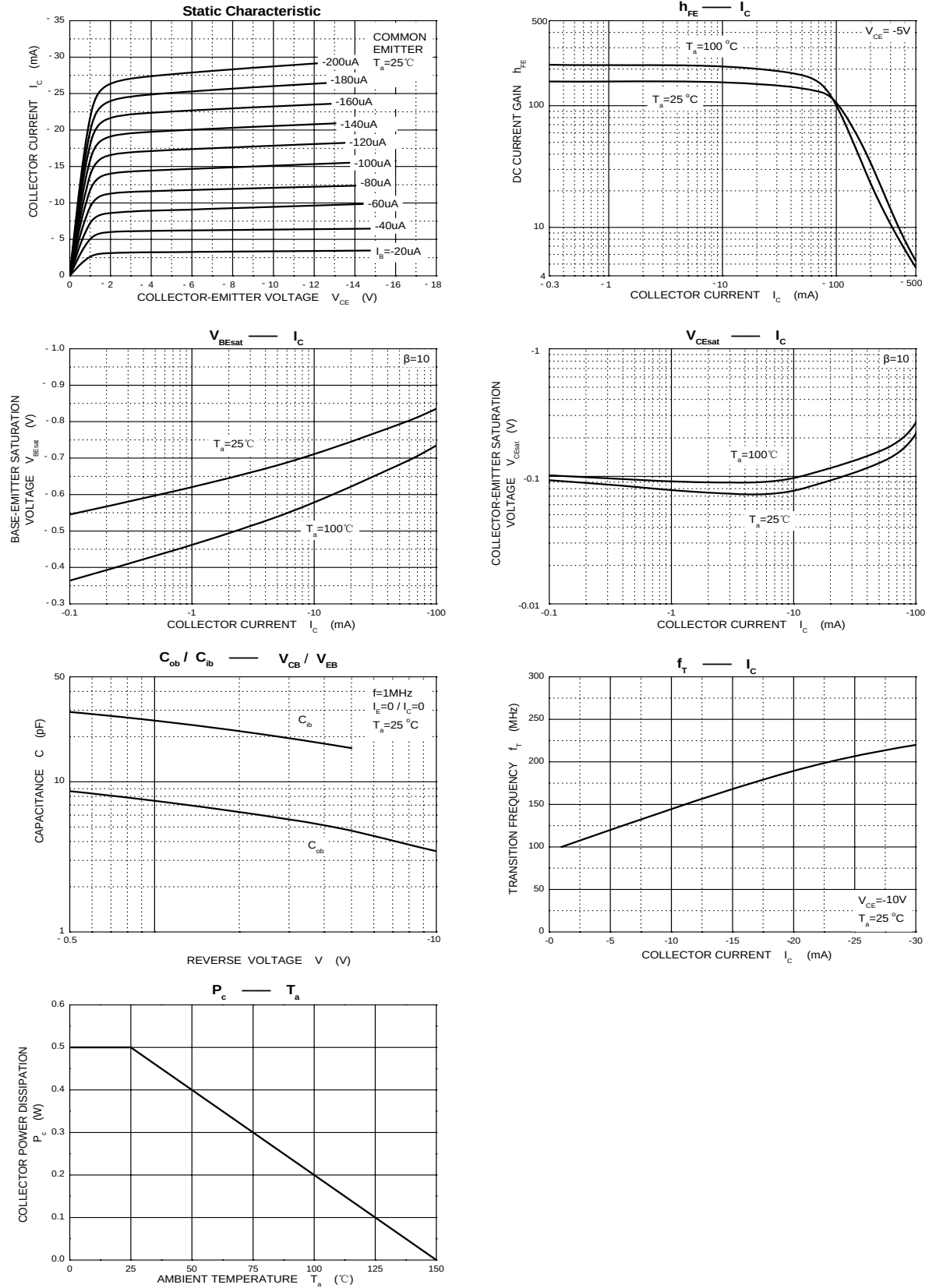
MAXIMUM RATINGS(Ta=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter -Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-0.5	A
Collector Power Dissipation	P_C	0.5	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55-+150	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$	250	°C/W

ELECTRICAL CHARACTERISTICS(TA=25°C unless otherwise noted.)

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-160	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-150	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = -120V, I_E = 0$	-	-	-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$	-	-	-50	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5V, I_C = -1mA$	50	-	-	
	$h_{FE(2)}$	$V_{CE} = -5V, I_C = -10mA$	60	-	300	
	$h_{FE(3)}$	$V_{CE} = -5V, I_C = -50mA$	50	-	-	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -1mA$	-	-	-0.2	V
		$I_C = -50mA, I_B = -5mA$	-	-	-0.5	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10mA, I_B = -1mA$	-	-	-1	V
		$I_C = -50mA, I_B = -5mA$	-	-	-1	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -10mA, f = 100MHz$	100	-	300	MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	-	6	pF
Noise Figure	NF	$V_{CE} = -5.0V, I_C = -200\mu A, R_S = 10\Omega, f = 10Hz \text{ to } 15.7kHz$	-	-	8	dB

Typical characteristics



Ordering information

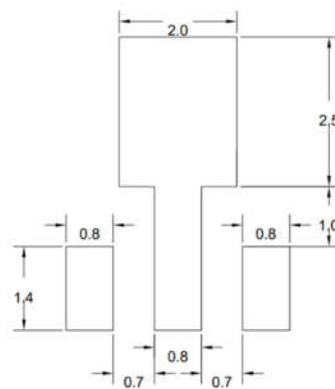
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

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