

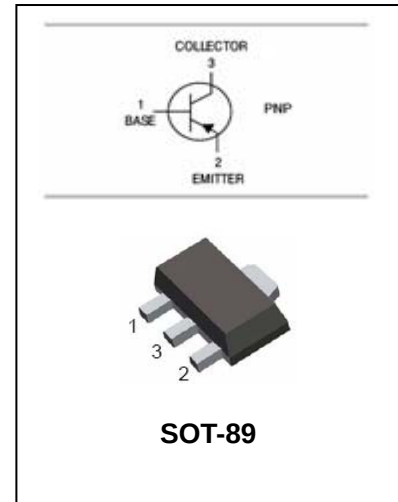


Surface Mount PNP Silicon Transistor

CXT5401

FEATURES

- Switching and amplification in high voltage.
- Low current(max. 600mA)
- High voltage (max. 180V)



APPLICATIONS

- High voltage amplifier application.

ORDERING INFORMATION

Type No.	Marking	Package Code
CXT5401	5401	SOT-89

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
P_D	Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal resistance	250	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1.0mA, I_B = 0$	-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}	$V_{CB} = -120V$		-50	nA
		$V_{CB} = -120V, T_A = 100^\circ C$		-50	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$		-50	nA
DC current gain	h_{FE}	$V_{CE} = -5V; I_C = -1mA$	50		
		$V_{CE} = -5V; I_C = -10mA$	100	300	
		$V_{CE} = -5V; I_C = -50mA$	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	
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10mA, I_B = -1mA$		-1.0	V
		$I_C = -50mA, I_B = -5mA$		-1.0	
Transition frequency	f_T	$V_{CE} = -10V, I_C = -10mA, f = 100MHz$	100	300	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		6.0	pF
Small-signal current gain	h_{fe}	$I_C = -1mA, V_{CE} = -10V, f = 1.0kHz$	40	200	
Noise Figure	NF	$I_C = -200uA, V_{CE} = -5V, f = 10-15.7kHz, R_S = 10\Omega$		8	dB



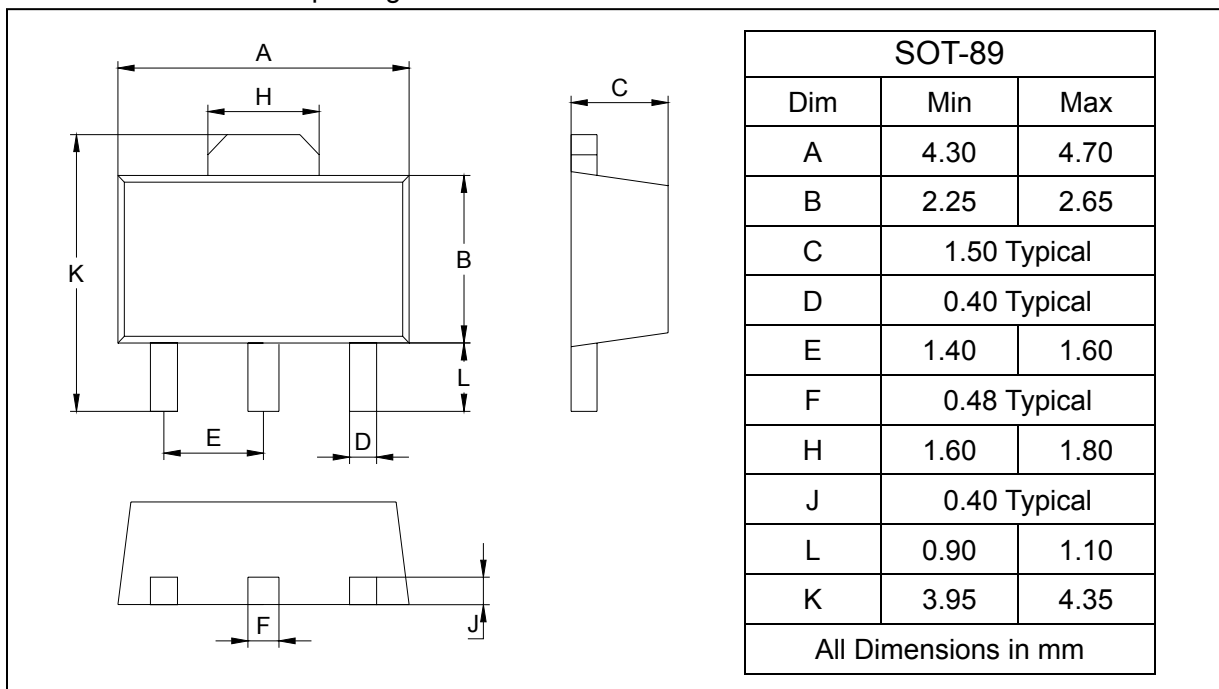
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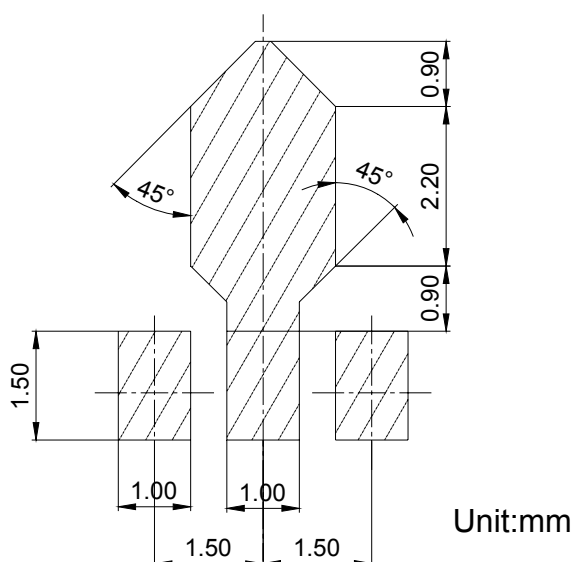
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
CXT5401	SOT-89	1000/Tape&Reel