

High Voltage Transistors

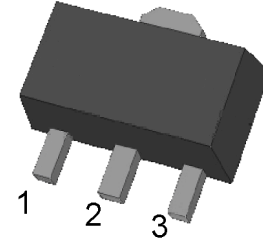
DESCRIPTION & FEATURES

High Collector Breakdown Voltage: ($V_{CBO}=-160V$, $V_{CEO}=-150V$)
 Low Leakage Current: ($I_{CBO}=-50nA$ (Max.), @ $V_{CB}=-120V$)
 Low Saturation Voltage: $V_{CE(sat)}=-0.5V$ (Max.), @ $I_C=-50mA$, $I_B=-5mA$
 Low Noise: $NF=8dB$ (Max.)

PIN ASSIGNMENT

PIN NAME	PIN NUMBER	FUNCTION
	SOT-89	
B	1	BASE
C	2	COLLECTOR
E	3	EMITTER

SOT-89



DEVICE MARKING: SXT5401=2L

MAXIMUM RATINGS($T_a=25^{\circ}C$)

CHARACTERISTIC	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	-150	Vdc
Collector-Base Voltage	V_{CBO}	-160	Vdc
Emitter-Base Voltage	V_{EBO}	-5.0	Vdc
Collector Current	I_C	-0.5	Adc

THERMAL CHARACTERISTICS

CHARACTERISTIC	Symbol	Max	Unit
Total power dissipation ($T_{amb} = 25^{\circ}C$;note1)	P_D	0.5	W
Junction and Storage Temperature	T_j , T_{stg}	150, -55~150	$^{\circ}C$
Operating ambient temperature	T_{amb}	-55~150	$^{\circ}C$
Thermal resistance from junction to ambient	$R_{th j-a}$	250	$^{\circ}C/W$

SMALL-SIGNAL CHARACTERISTICS

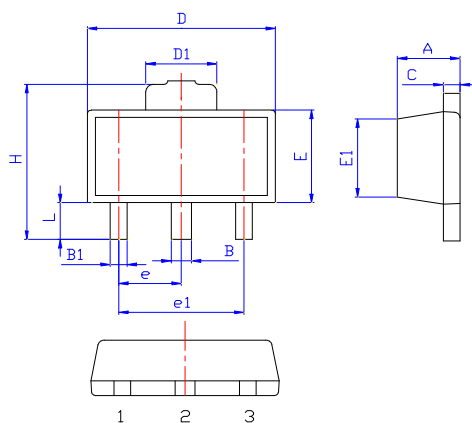
Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Transition Frequency	fT	$V_{CE}=-10V, I_E=-10mA$, $f=100MHz$	100	—	300	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	—	—	6	pF
Noise Figure	NF	$R_S=10\Omega, f=10Hz$ to $15.7KHz$ $V_{CE}=-5.0Vdc, I_C=-200\mu Adc$	—	—	8.0	dB

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector cut-off current	I _{CB0}	V _{CB} = -120Vdc, I _E = 0	—	-50	nA
Emitter cut-off current	I _{EBO}	V _{EB} = -4.0Vdc, I _C = 0	—	-50	nA
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C = -1.0 mAdc, I _B = 0	-150	—	Vdc
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C = -100 μ Adc, I _E = 0	-160	—	Vdc
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E = -10 μ Adc, I _C = 0	-5.0	—	Vdc
DC current gain	h _{FE}	I _C = -1.0mAdc, V _{CE} = -5.0Vdc	50	—	—
		I _C = -10mAdc, V _{CE} = -5.0Vdc	60	360	—
		I _C = -50mAdc, V _{CE} = -5.0Vdc	50	—	—
Collector-emitter saturation voltage	V _{CEsat}	I _C = -10mAdc, I _B = -1.0mAdc	—	-0.2	Vdc
		I _C = -50mAdc, I _B = 5.0mAdc	—	-0.5	Vdc
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C = -10mAdc, I _B = -1.0mAdc	—	-1.0	Vdc
		I _C = -50mAdc, I _B = 5.0mAdc	—	-1.0	Vdc

SOT-89

(SOT-89 DIMENSION)



DIM	MILLIMETERS	
	MIN.	MAX.
A	1.40	1.60
B	0.46	0.56
B1	0.36	0.48
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
E1	---	---
e	1.50REF	
e1	3.00REF	
H	3.94	4.25
L	0.89	1.20

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Shikues manufacturer](#):

Other Similar products are found below :

[BC559C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [NJVMJD148T4G](#) [NTE16](#) [NTE195A](#) [IMX9T110](#) [2N4401-A](#) [2N4403](#) [2N6728](#)
[2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [FMC5AT148](#) [2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC4618TLN](#) [CPH6501-](#)
[TL-E](#) [MCH4021-TL-E](#) [Jantx2N5416](#) [US6T6TR](#) [BAX18/A52R](#) [BC556/112](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#)
[TTA1452B,S4X\(S](#) [2N3879](#) [NTE13](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [JANTX2N2920L](#) [JANTX2N3735](#) [JANSR2N2222AUB](#)
[CMLT3946EG TR](#) [SNSS40600CF8T1G](#) [CMLT3906EG TR](#) [GRP-DATA-JANS2N2907AUB](#) [GRP-DATA-JANS2N2222AUA](#)
[MMDT3946FL3-7](#) [2N4240](#) [MSB30KH-13](#) [2N2221AUB](#) [2SD1815T-TL-E](#)