

PNP Silicon Epitaxial Planar Transistor

Features

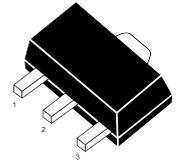
Low $V_{CE(sat)}$, high current.

Applications

General purpose switching and muting, LCD back-lighting, supply line switching circuits.

MARKING:5320

SOT-89-3L



1. BASE
2. EMITTER
3. COLLECTOR



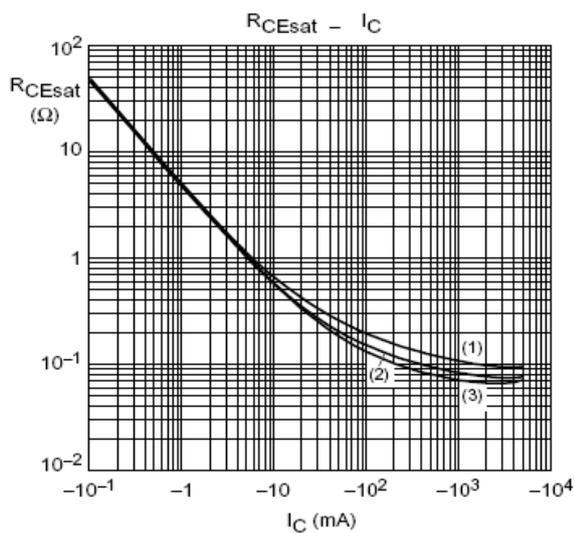
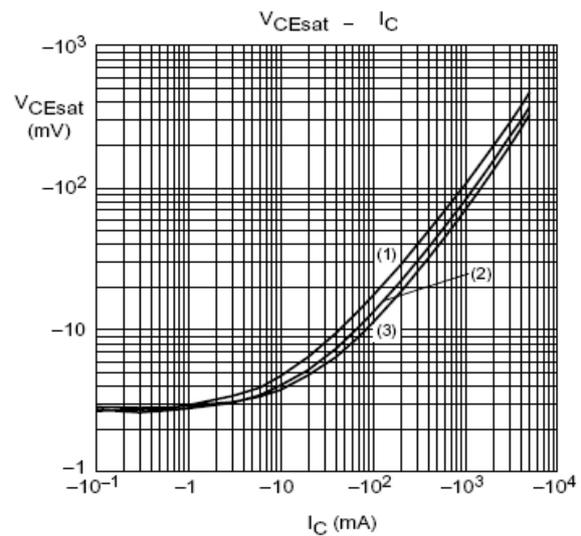
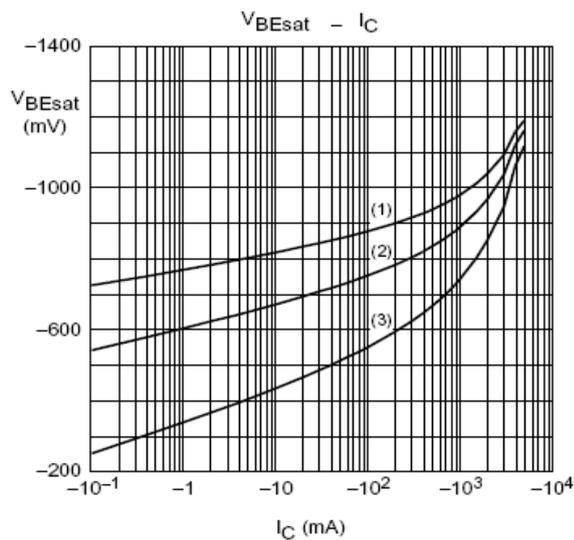
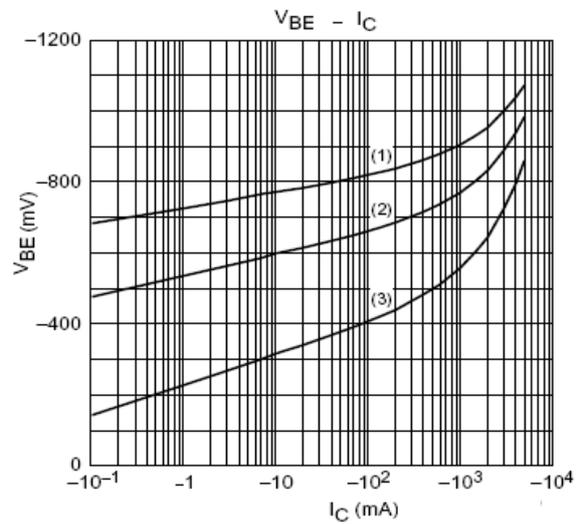
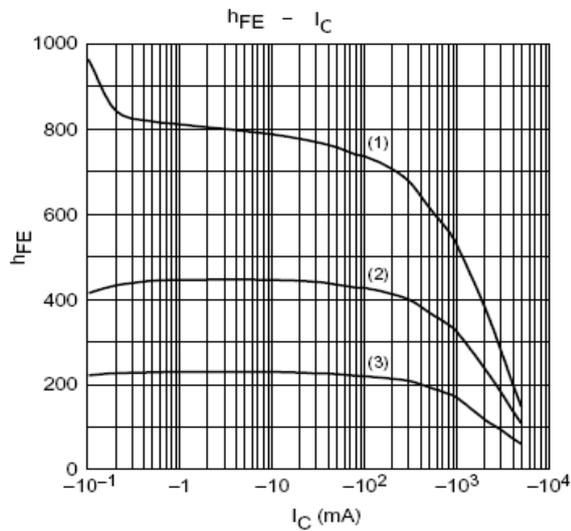
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-20	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-2.0	A
Peak Collector Current	I_{CM}	-5.0	A
Base Current	I_B	-0.5	A
total power dissipation	$P_{tot(1)}$ ^{註2}	600	mW
total power dissipation	$P_{tot(2)}$ ^{註1、2}	1.2	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Electrical Characteristics(Ta=25°C)

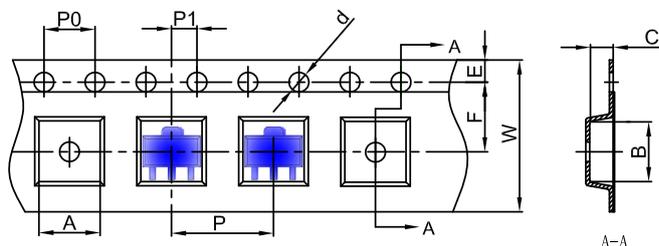
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-20V$ $I_E=0$			-0.1	μA
		$V_{CB}=-20V$ $I_E=0$ $T=150^\circ C$			-50	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2.0V$ $I_C=-500mA$	220		450	
	$h_{FE(2)}$	$V_{CE}=-2.0V$ $I_C=-100mA$	220			
	$h_{FE(3)}$	$V_{CE}=-2.0V$ $I_C=-1.0A$	200			
	$h_{FE(4)}$	$V_{CE}=-2.0V$ $I_C=-2.0A$	150			
	$h_{FE(5)}$	$V_{CE}=-2.0V$ $I_C=-3.0A$	100			
Collector-Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-500mA$ $I_B=-50mA$			-100	mV
	$V_{CE(sat)(2)}$	$I_C=-2.0A$ $I_B=-100mA$			-300	mV
Equivalent on-resistance	$R_{CE(sat)}$	$I_C=-2.0A$ $I_B=-200mA$		125	150	m Ω
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2.0A$ $I_B=-100mA$			-1.1	V
		$I_C=-3.0A$ $I_B=-300mA$			-1.2	V
Base-Emitter Voltage	$V_{BE(ON)}$	$V_{CE}=-2.0V$ $I_C=-1.0A$			-1.2	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $I_C=-100mA$ $f=100MHz$	100			MHz
Collector Capacitance	C_C	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$			50	pF

Typical Characteristics



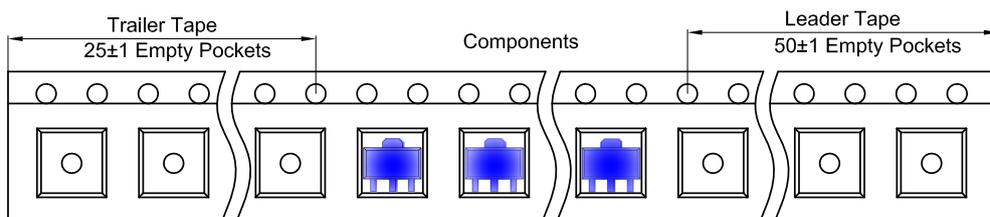
SOT-89-3L Tape and Reel

SOT-89-3L Embossed Carrier Tape

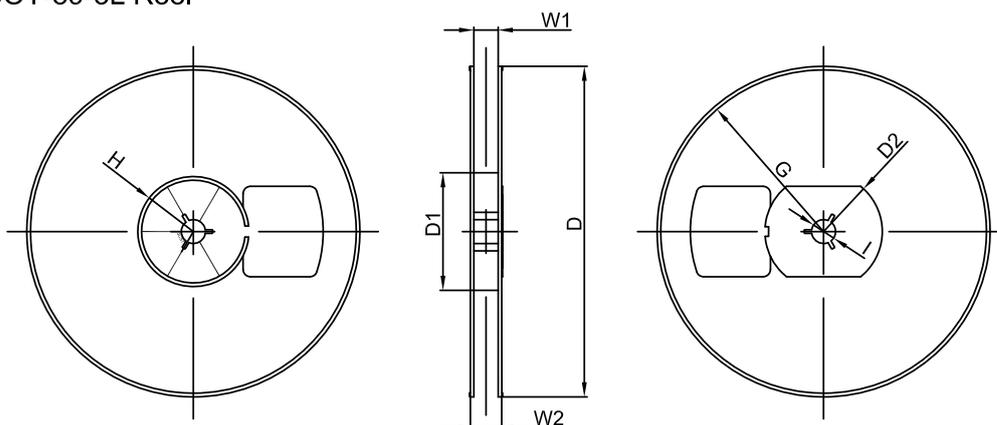


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-89-3L	4.85	4.45	1.85	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

SOT-89-3L Tape Leader and Trailer

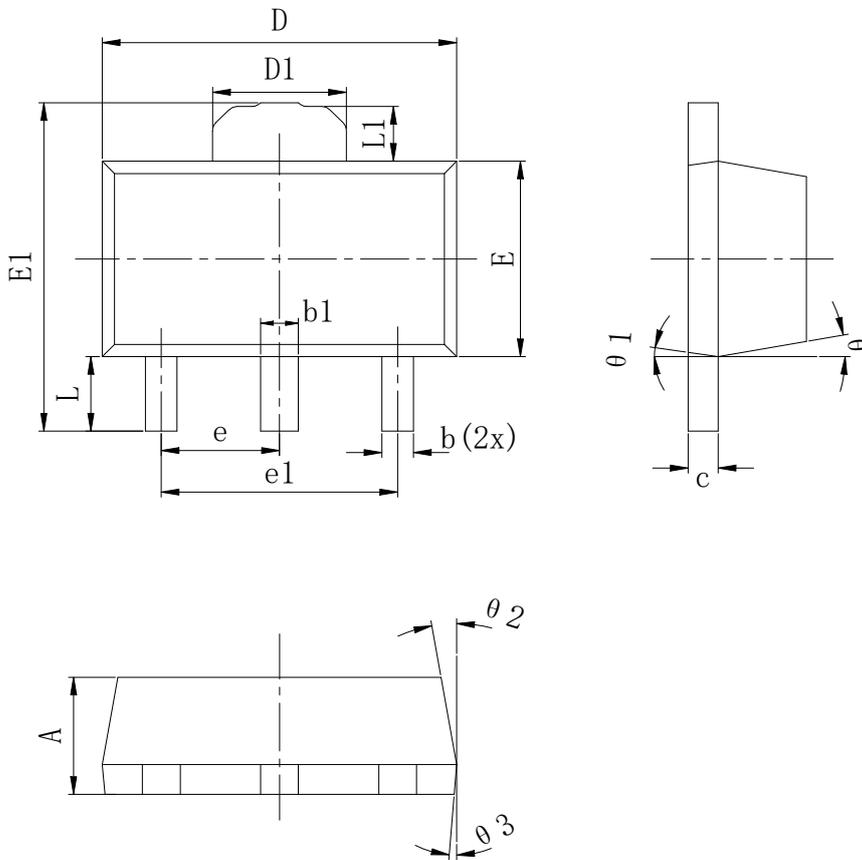


SOT-89-3L Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø180.00	60.00	R32.00	R86.50	R30.00	Ø13.00	13.20	16.50

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
1000 pcs	7 inch	10,000 pcs	203×203×195	40,000 pcs	438×438×220	



SYMBOL	MILLIMETER		
	MIN	TYP.	MAX
A	1.400	1.500	1.600
b	0.320	0.400	0.520
b1	0.400	0.480	0.580
c	0.350	0.381	0.440
D	4.400	4.500	4.600
D1	1.700REF		
E	2.400	2.500	2.600
E1	4.050	4.200	4.350
e	1.500TYP.		
e1	3.000TYP.		
L	0.800	0.950	1.200
L1	0.700REF		
θ	10° REF		
θ 1	8° REF		
θ 2	10° REF		
θ 3	5° REF		

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