

Plastic-Encapsulate Transistors

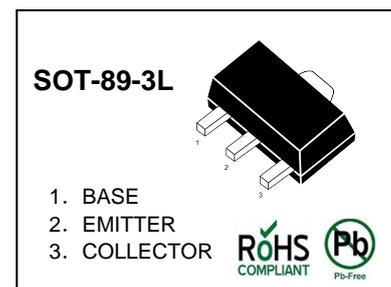
TRANSISTOR (PNP)

FEATURES

Compliment to 2SA2071

MARKING: Y2

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)



Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_c	Collector Current -Continuous	-3	A
P_c	Collector Power Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C}/\text{W}$
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~150	$^{\circ}\text{C}$

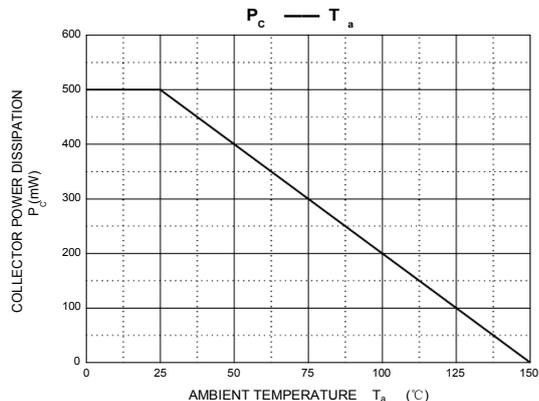
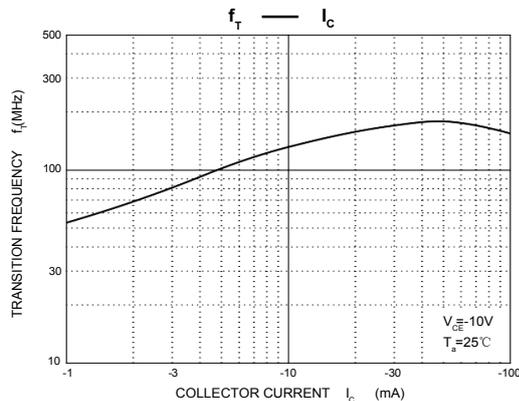
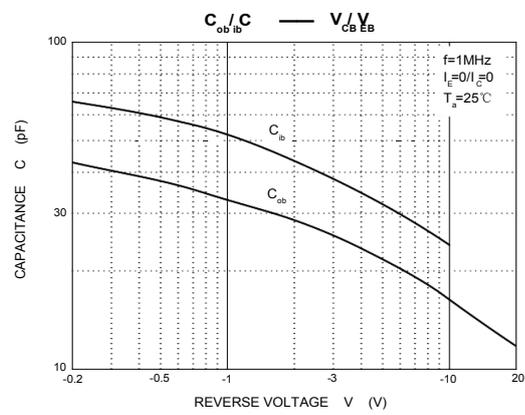
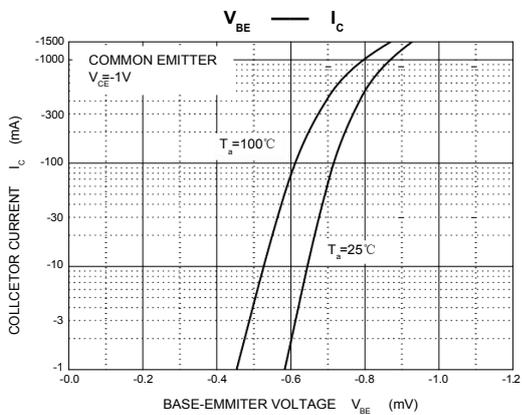
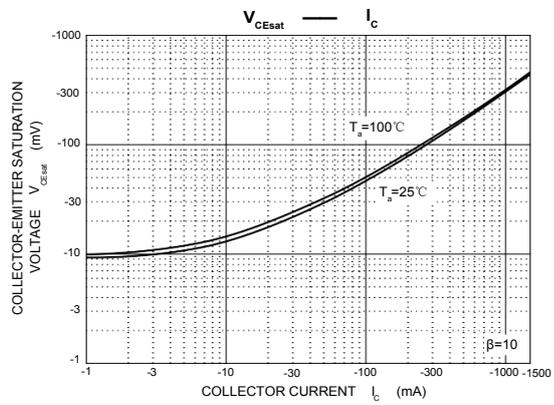
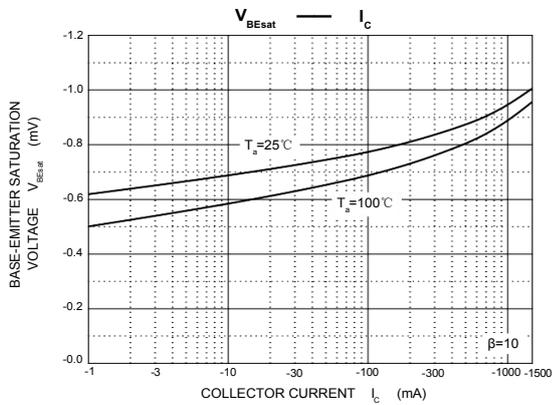
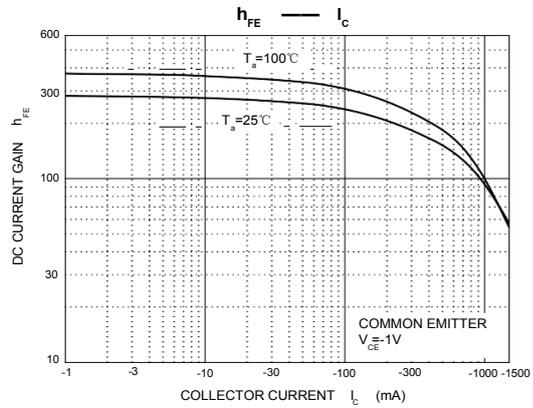
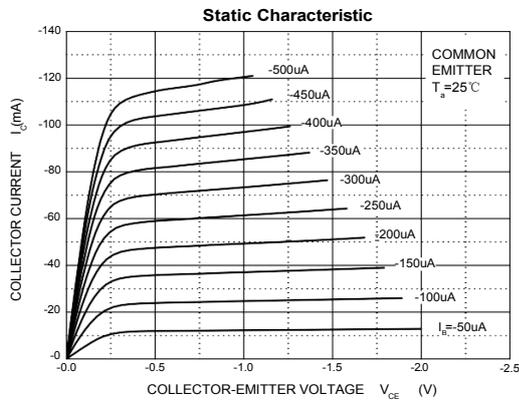
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ.	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_c = -100\mu\text{A}, I_E = 0$	-60	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_c = -1\text{mA}, I_B = 0$	-60	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_c = 0$	-6	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$	-	-	-1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_c = 0$	-	-	-1.0	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}, I_c = -100\text{mA}$	120	-	270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -2\text{A}, I_B = -0.2\text{A}$	-	-0.2	-0.5	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_c = -100\text{mA}$ $f = 10\text{MHz}$	-	180	-	MHz
output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0\text{A}$ $f = 1\text{MHz}$	-	50	-	pF
Turn-on time	T_{on}	$I_c = -3\text{A},$ $I_{B1} = -300\text{mA},$ $I_{B2} = 300\text{mA},$ $V_{CC} = -25\text{V},$ $R_L = 8.3\Omega,$ See test circuit	-	20	-	ns
Storage time	T_{stg}		-	150	-	ns
Fall time	T_f		-	20	-	ns

CLASSIFICATION OF $h_{FE(1)}$

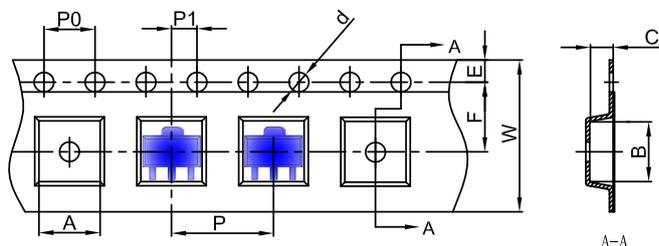
Rank	Q	
HFE	120-270	

Typical Characteristics



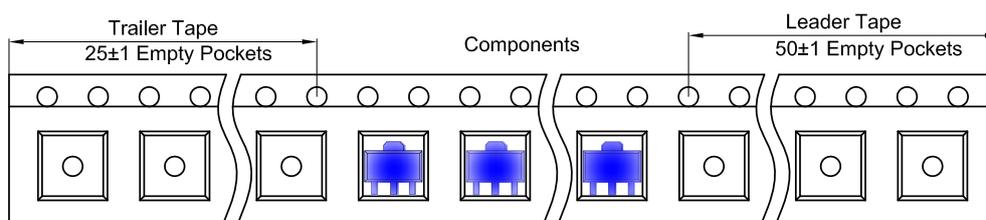
SOT-89-3L Tape and Reel

SOT-89-3L Embossed Carrier Tape

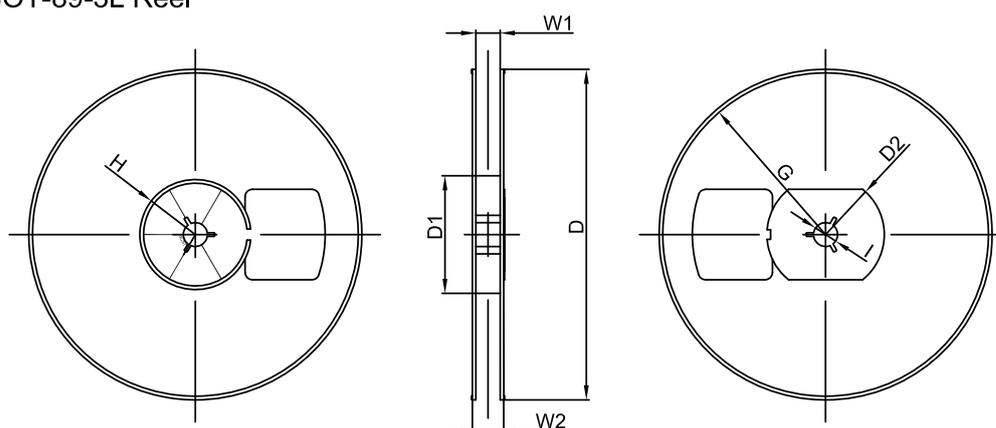


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-89-3L	4.85	4.45	1.85	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

SOT-89-3L Tape Leader and Trailer

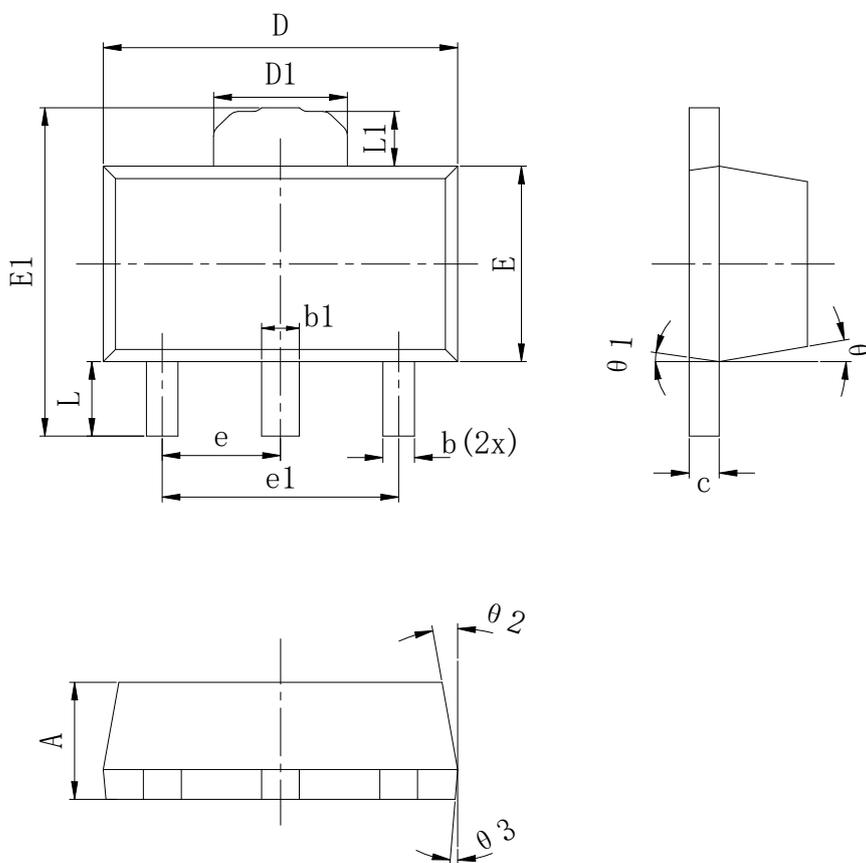


SOT-89-3L Reel



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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