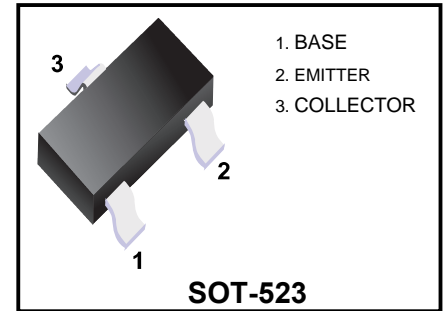


Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

- ◆ Reduces Board Space
- ◆ High h_{FE}
- ◆ Low $V_{CE(sat)}$



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-150	mA
P_C	Collector Power Dissipation	150	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -50\mu A, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1.0mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-6.0			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE}^{(1)}$	$V_{CE} = -6.0V, I_C = -1.0mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}^{(2)}$	$I_C = -50mA, I_B = -5.0mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^{(2)}$	$I_C = -50mA, I_B = -5.0mA$			-1.2	V
Transition frequency	f_T	$V_{CE} = -12V, I_C = -2.0mA, f = 30MHz$		140		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -12V, I_E = 0, f = 1MHz$		3.5	5	pF

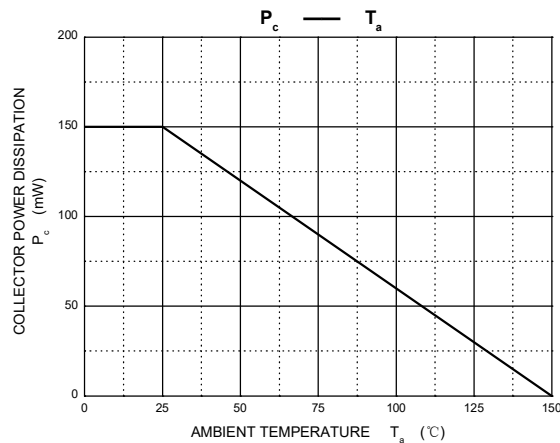
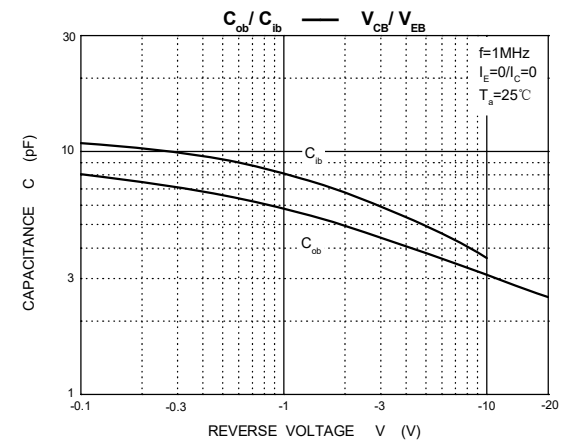
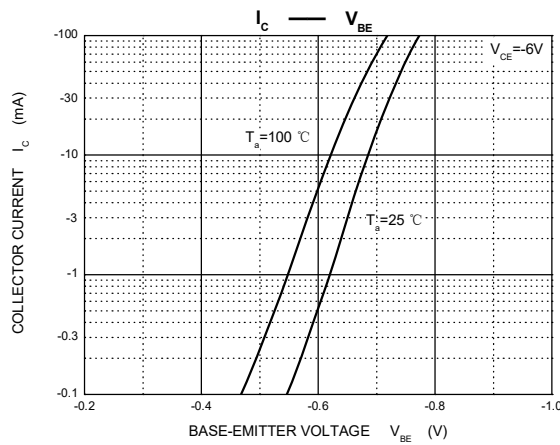
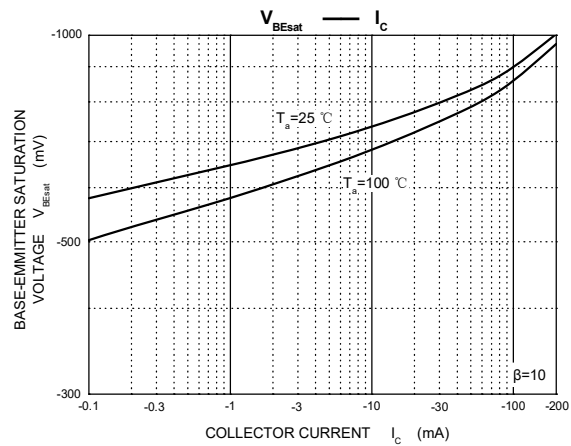
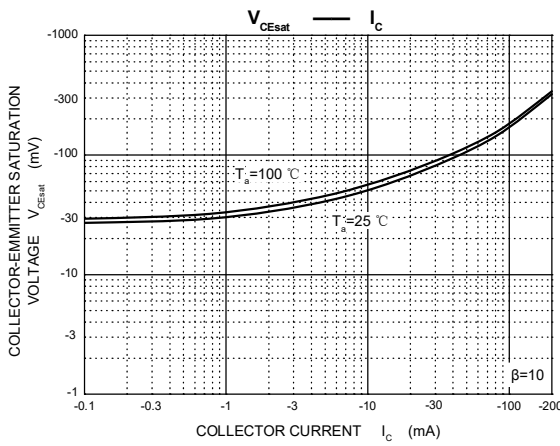
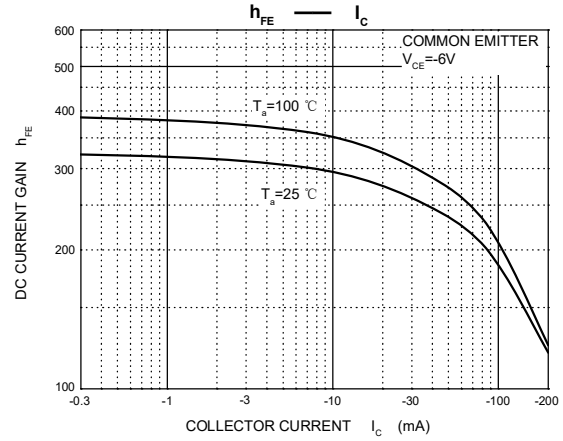
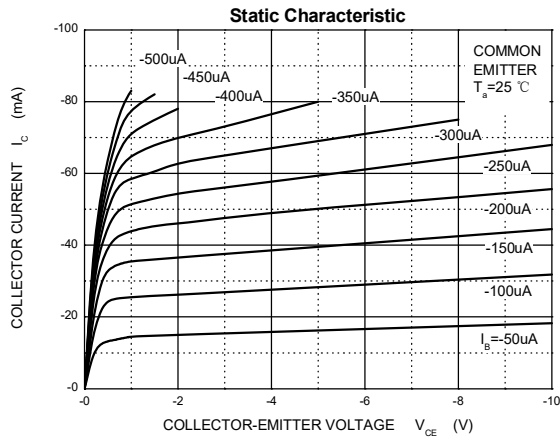
Note(1):

CLASSIFICATION OF h_{FE}

Rank	2SA1774-Q	2SA1774-R	2SA1774-S
Range	120-270	180-390	270-560
Marking	FQ	FR	FS

(2).Pulse Test :Pulse Width $\leq 300\mu s, D.C \leq 2\%$

Typical Characteristics



Ordering information

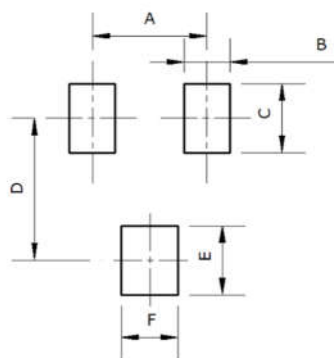
Package	Packing Description	Base Quantity	Packing Quantity
SOT-523	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-523

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	1.50	1.70	59	67
B	0.75	0.85	30	33
C	1.45	1.75	57	69
D	0.50TYP		0.020TYP	
E	0.90	1.10	35	43
G	0.00	0.10	0	4
H	0.60	0.80	24	31
J	0.10	0.20	4	8
K	0.15	0.35	6	14
L	0.26	0.46	10	18

The recommended mounting pad size



Millimeter (mm)	
Dim.	TYP
A	1.00
B	0.40
C	0.60
D	1.24
E	0.60
F	0.50

Disclaimer

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