

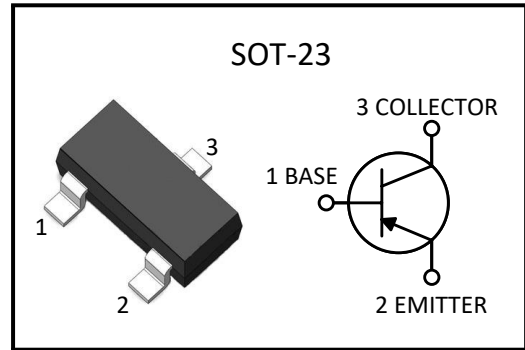
S9015

PNP Plastic-Encapsulate Transistor

Features

- $V_{CE} = -45V$
- $I_C = -0.1A$
- $f_T = 150MHz$ @ $V_{CE} = -5V$, $I_C = -10mA$, $f = 30MHz$

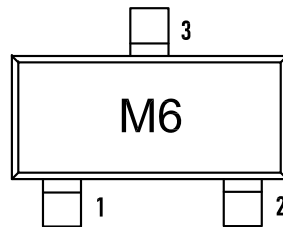
Package



Description

- As complementary type the NPN transistor S9014 is recommended
- Epitaxial planar die constructio
- SOT-23 Plastic Package.

Marking



Ordering information

Order code	Package	Marking	Base qty	Delivery mode
S9015	SOT-23	M6	3K	Tape and reel

Absolute Maximum Ratings @ $T_A = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.1	A
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	mW
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55 to + 150	$^\circ C$

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S9015

PNP Plastic-Encapsulate Transistor

Electrical Characteristics (T_A=+25°C, unless otherwise specified)

Symbol	Parameter	Test condition	Min.	Typ.	Max.	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-10μA, I _E =0	-50	—	—	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-1mA, I _B =0	-45	—	—	
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-10μA, I _C =0	-5	—	—	
I _{CBO}	Collector cut-off current	V _{CB} =-50V, I _E =0	—	—	-0.1	uA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V, I _C =0	—	—	-0.1	
h _{FE(2)}	DC current gain	V _{CE} =-5V, I _C =-1mA	200	—	1000	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =-100mA, I _B =-10mA	—	—	-0.3	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =-100mA, I _B =-10mA	—	—	-1	
f _T	Transition frequency	V _{CE} =-5V, I _C =-10mA, f=30MHZ	150	—	—	MHZ
h _{FE(1)} Rank	L(200-450)	H(450-1000)				



Typical Performance Characteristics($T_J = 25^\circ\text{C}$, unless otherwise noted)

Figure 1 : I_C — V_{CE}

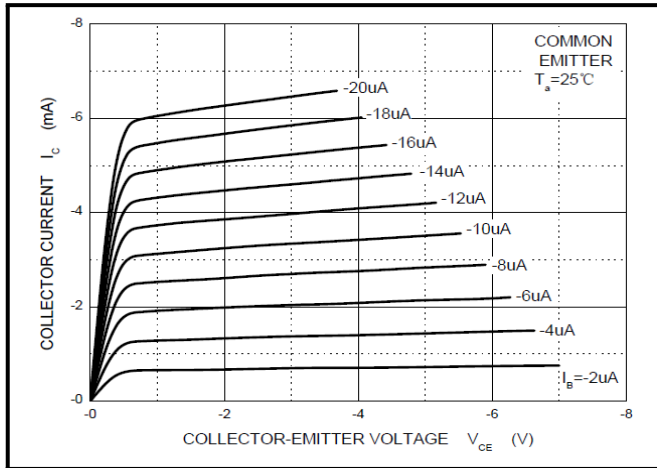


Figure 2 : h_{FE} — I_C

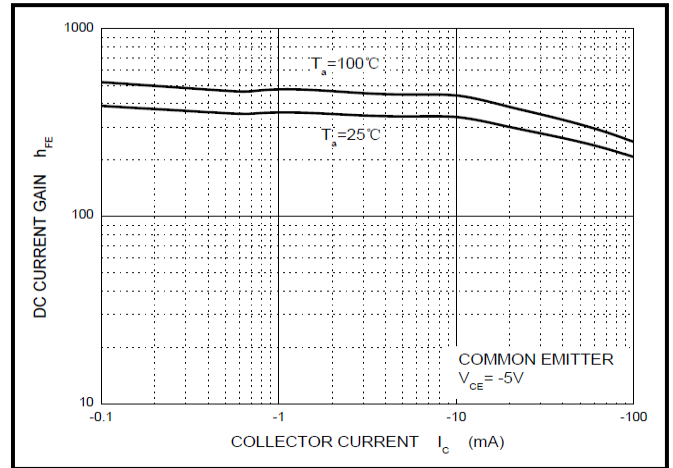


Figure 3 : $V_{BE(sat)}$ — I_C

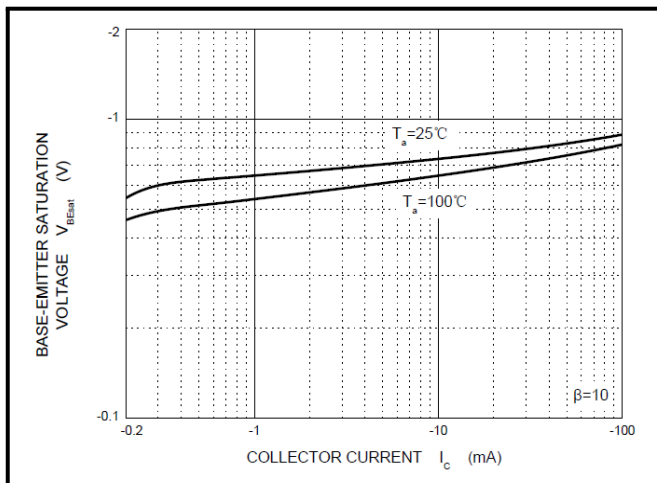


Figure 4 : $V_{CE(sat)}$ — I_C

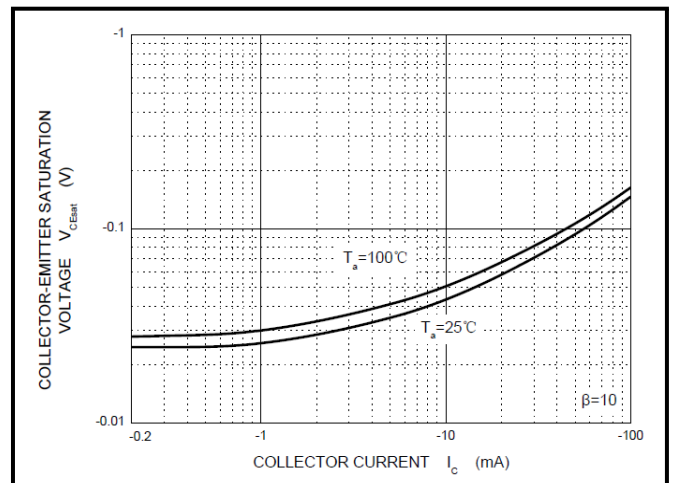


Figure 5 : I_C — V_{BE}

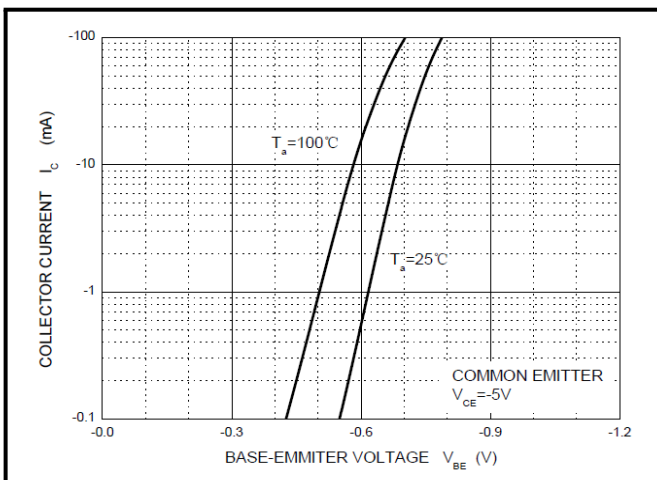
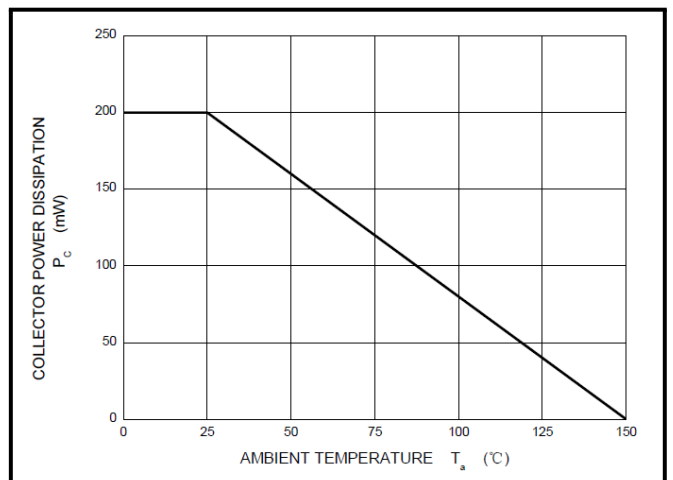


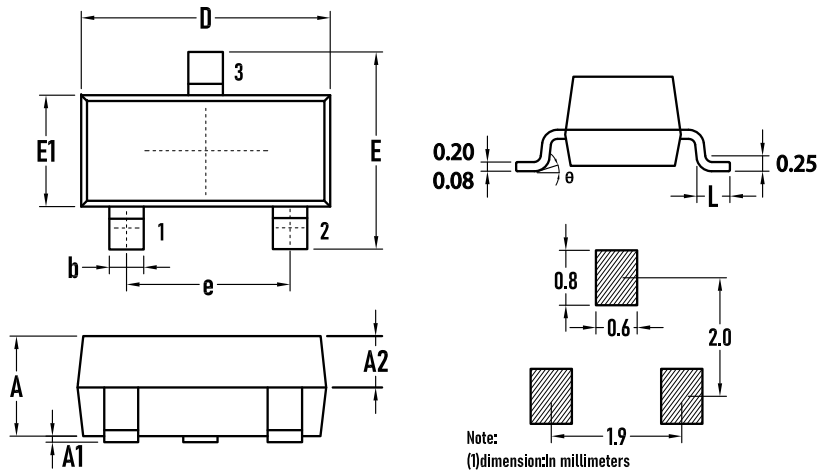
Figure 6 : P_C — T_a



S9015

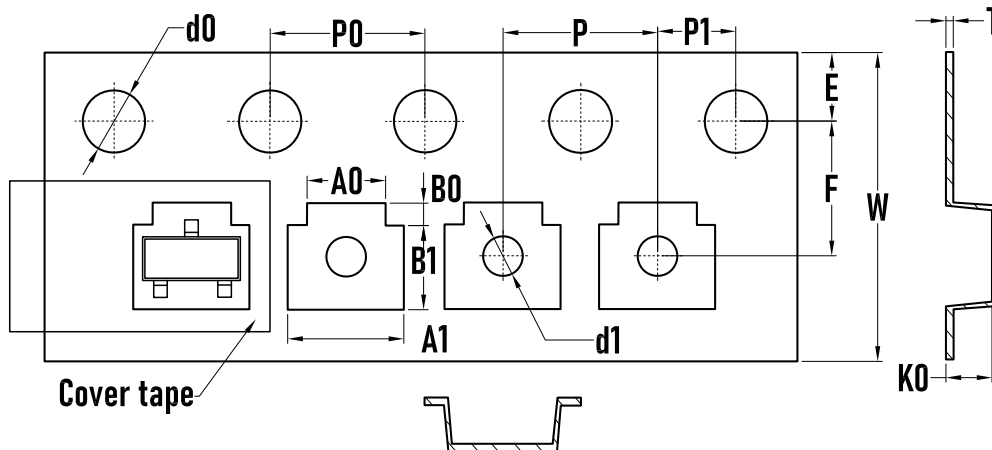
PNP Plastic-Encapsulate Transistor

Outline Drawing - SOT-23



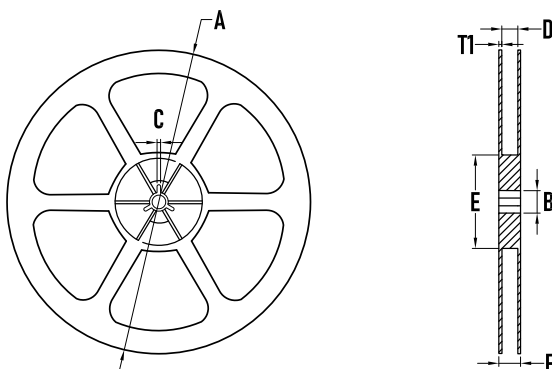
SYMBOL	MILLIMETER		
	MIN.	Typ	MAX
A	0.90	1.00	1.10
A1	0.01	—	0.10
A2	0.50	0.60	0.70
D	2.80	2.90	3.00
b	0.25	0.35	0.45
E	2.10	2.30	2.50
E1	1.20	1.30	1.40
e	1.80	1.90	2.00
L	0.25	0.35	0.45
θ	0	—	8°

Packaging Tape - SOT-23



SYMBOL	MILLIMETER
A0	2.10±0.10
A1	3.10±0.10
B0	0.65±0.10
B1	2.75±0.10
d0	1.55±0.10
d1	1.00±0.05
E	1.75±0.10
F	3.50±0.10
K0	1.10±0.10
P	4.00±0.10
P0	4.00±0.10
P1	2.00±0.10
W	8.00±0.30
T	0.20 ±0.05

Packaging Reel



SYMBOL	MILLIMETER
A	177.8±0.2
B	3.1
C	13.50
D	9.6±0.3
E	75±0.2
F	12.3±0.3
T1	1.0±0.2
Quantity	3000PCS

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