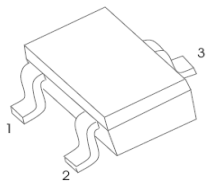


TRANSISTOR(NPN)	SOT-523 Plastic-Encapsulate Transistors
<p>SOT-523</p>  <p>1. BASE 2. EMITTER 3. COLLECTOR</p> <p>Marking :1P</p>	<p>Features</p> <ul style="list-style-type: none"> ● Complementary to MMBT2907AT ● Small Package

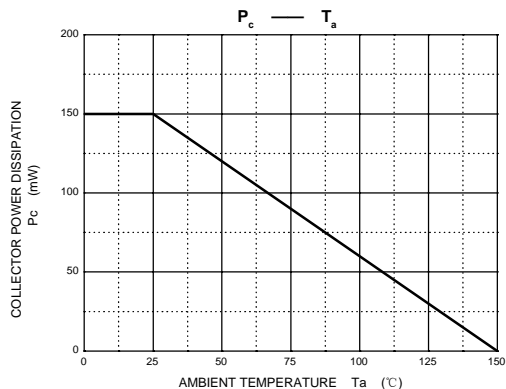
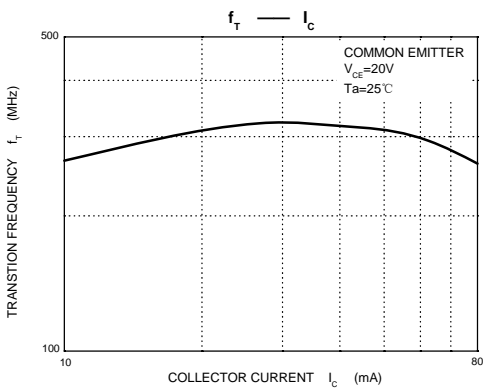
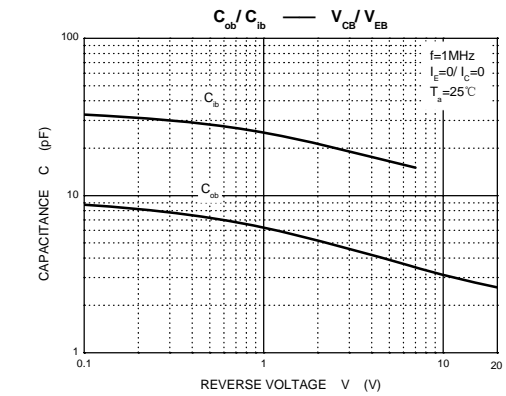
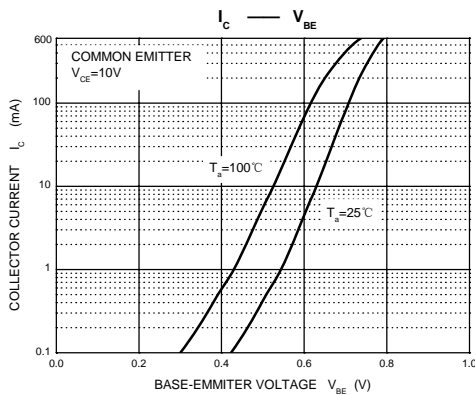
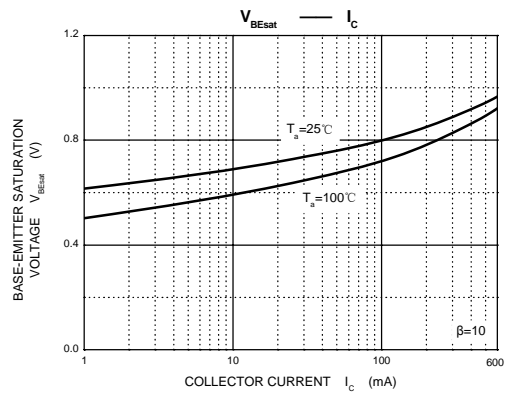
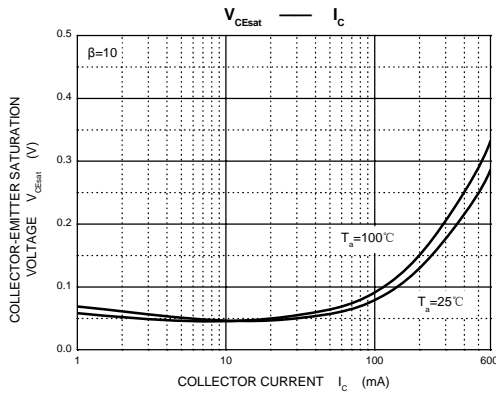
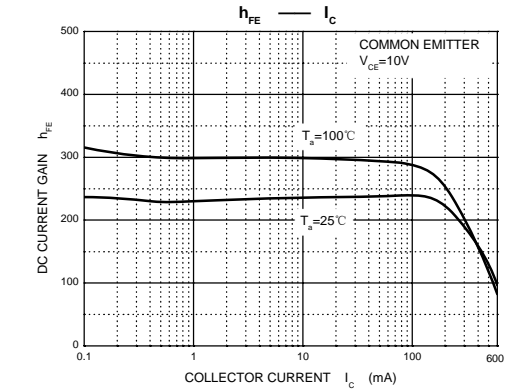
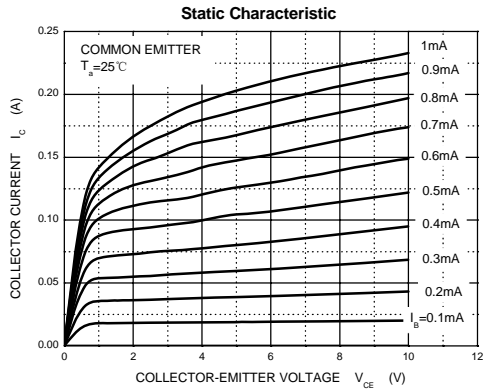
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	75	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current	600	mA
P _C	Collector Power Dissipation	150	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	833	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

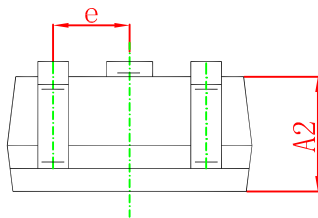
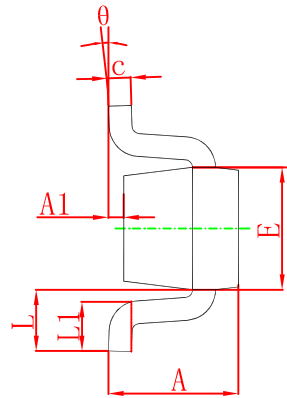
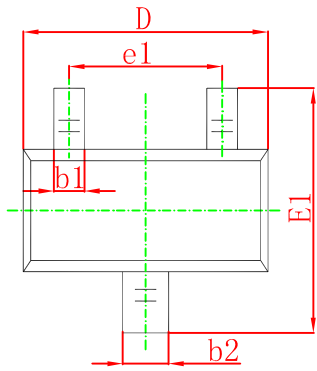
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	75			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	40			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6			V
Collector cut-off current	I _{CEX}	V _{CE} =60V, V _{EB(off)} =3V			10	nA
DC current gain	h _{FE(1)}	V _{CE} =10V, I _C =0.1mA	35			
	h _{FE(2)}	V _{CE} =10V, I _C =1mA	50			
	h _{FE(3)}	V _{CE} =10V, I _C =10mA	75			
	h _{FE(4)}	V _{CE} =10V, I _C =150mA	100		300	
	h _{FE(5)}	V _{CE} =10V, I _C =500mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =150mA, I _B =15mA			0.3	V
		I _C =500mA, I _B =50mA			1	V
Collector-emitter saturation voltage	V _{BE(sat)}	I _C =150mA, I _B =15mA			1.2	V
		I _C =500mA, I _B =50mA			2	V
Transition frequency	f _T	V _{CE} =20V, I _C =20mA, f=100MHz	300			MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			8	pF
Delay time	t _d	V _{CC} =30V, V _{BE(off)} =-0.5V I _C =150mA, I _{B1} =15mA			10	ns
Rise time	t _r	V _{CC} =30V, V _{BE(off)} =-0.5V I _C =150mA, I _{B1} =15mA			25	ns
Storage time	t _s	V _{CC} =30V, I _C =150mA, I _{B1} =I _{B2} =15mA			225	ns
Fall time	t _f	V _{CC} =30V, I _C =150mA, I _{B1} =I _{B2} =15mA			60	ns

Typical Characteristics

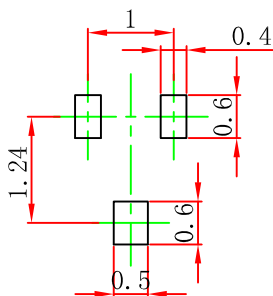


SOT-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

SOT-523 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)