



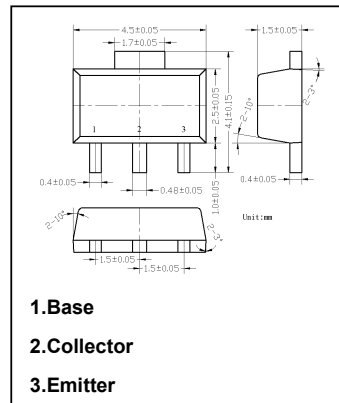
SOT-89 Plastic-Encapsulate Transistors

D965 NPN Transistors

Features

- Low Collector-Emitter Saturation Voltage
- Large Collector Power Dissipation and Current
- Mini Power Type Package

Marking: D965



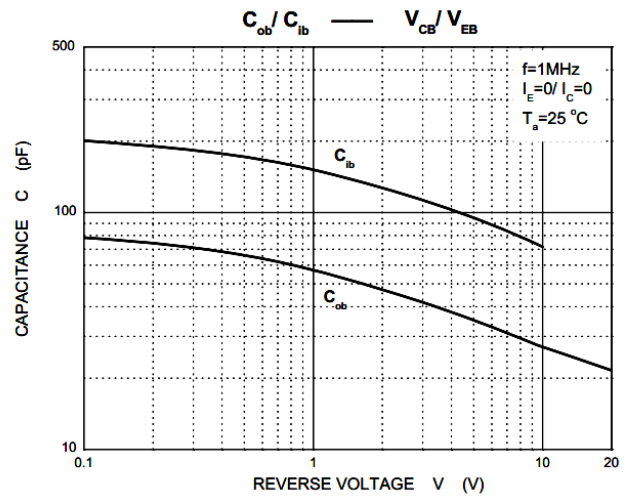
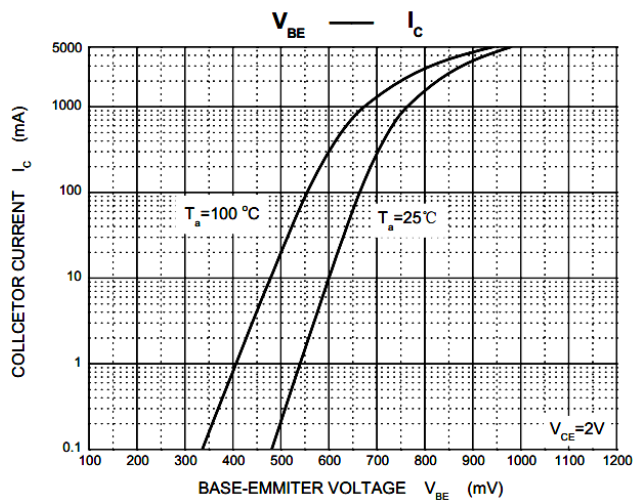
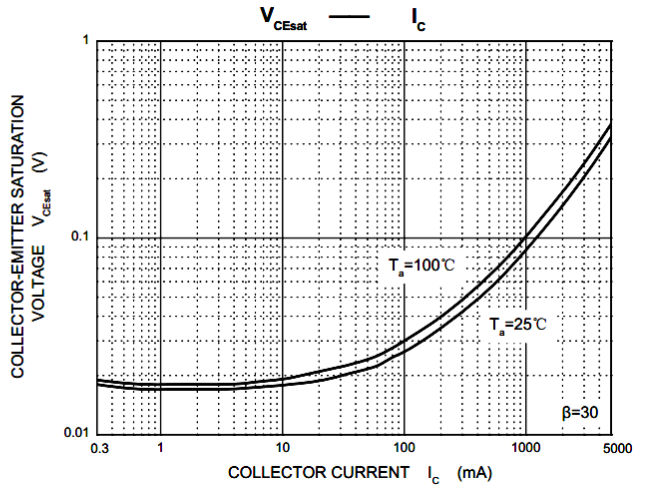
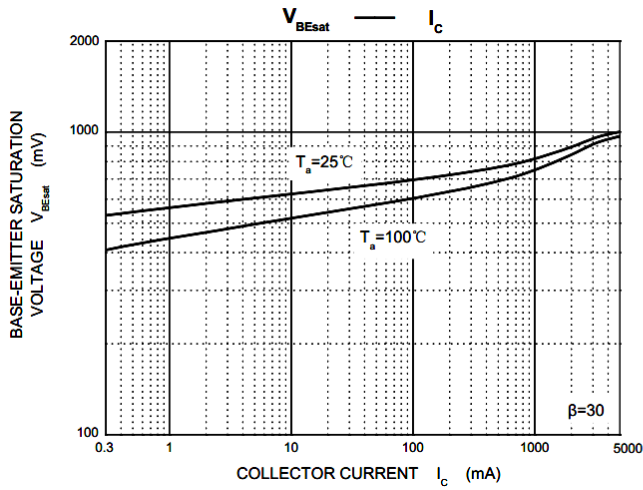
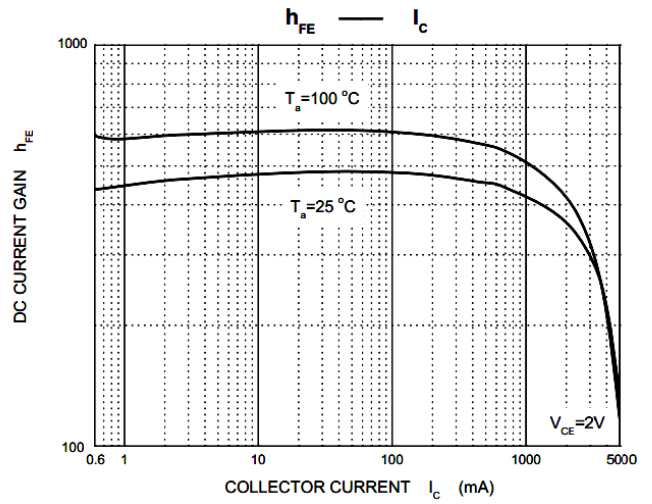
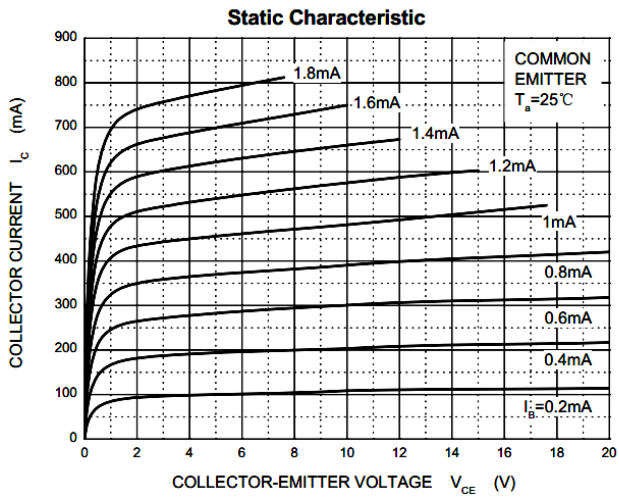
Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CEO}	Collector Emitter Voltage	20	V
V _{CBO}	Collector Base Voltage	40	V
V _{EBO}	Emitter Base Voltage	7	V
I _C	Collector Current	5	A
P _C	Collector Power Dissipation	750	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	167	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	- 55 to +150	°C

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100μA, I _E =0	40			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA, I _B =0	20			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10μA, I _C =0	7			V
I _{CBO}	Collector cut-off current	V _{CB} =10V, I _E =0			100	nA
I _{EBO}	Emitter cut-off current	V _{EB} =7V, I _C =0			100	nA
h _{FE(1)}	DC current gain	V _{CE} =2V, I _C =1mA		200		
h _{FE(2)}		V _{CE} =2V, I _C =500mA	800		1200	
h _{FE(3)}		V _{CE} =2V, I _C =2A	150			
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =3A, I _B =0.1A			1	V
f _T	Transition frequency	V _{CE} =6V, I _C =50mA, f=200MHz		150		MHz
C _{ob}	Collector output capacitance	V _{CB} =20V, I _E =0, f=1MHz			50	pF

Typical Characteristics



Typical Characteristics

