

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Voltage Application
- Telephone Application
- Complementary to MMBTA56

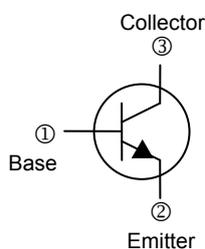
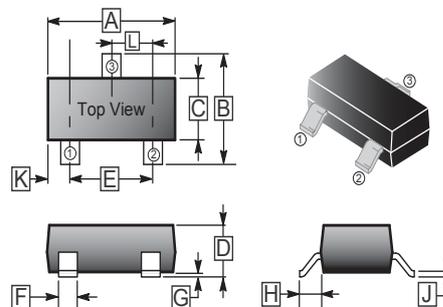
MARKING

1GM

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			

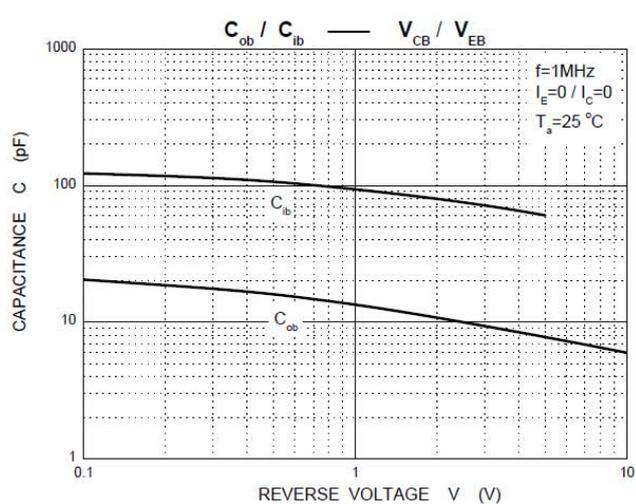
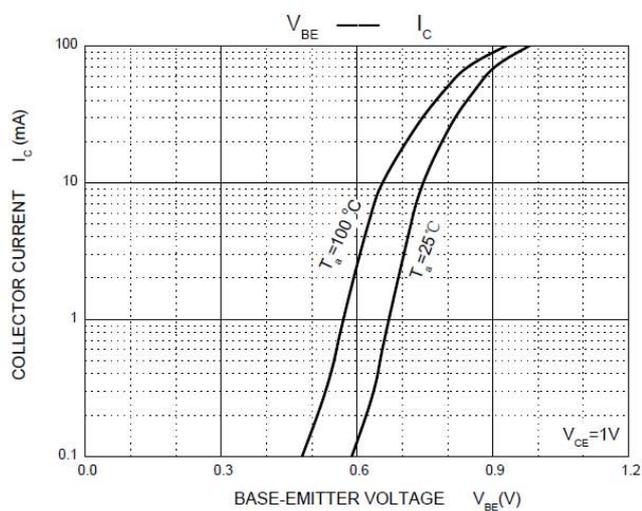
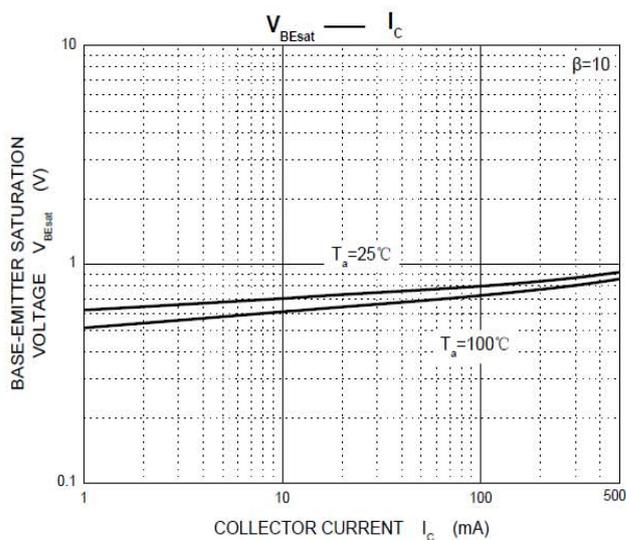
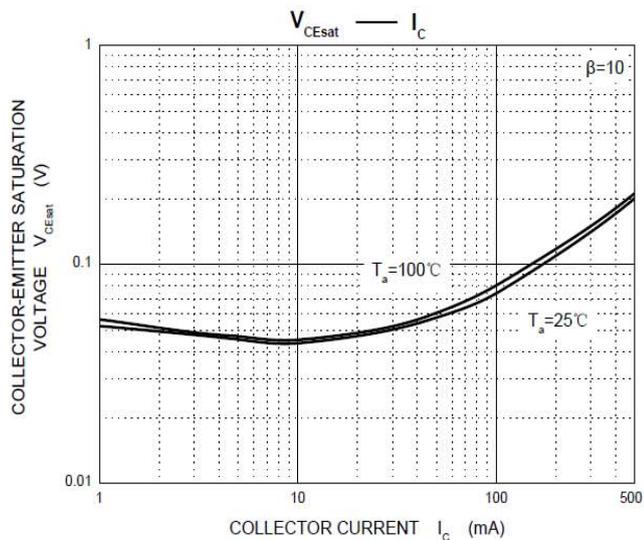
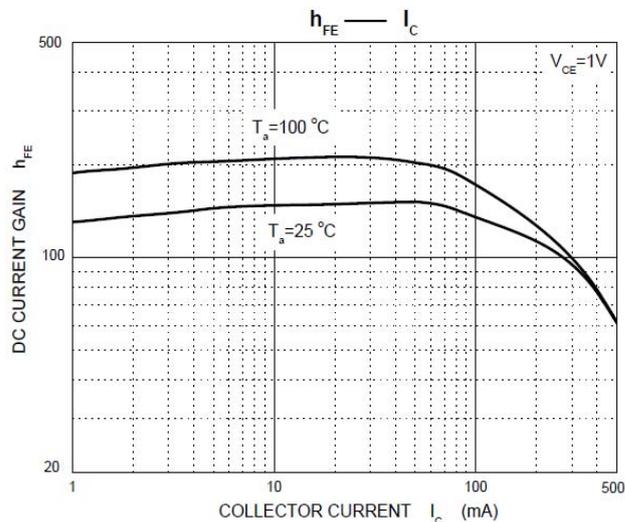
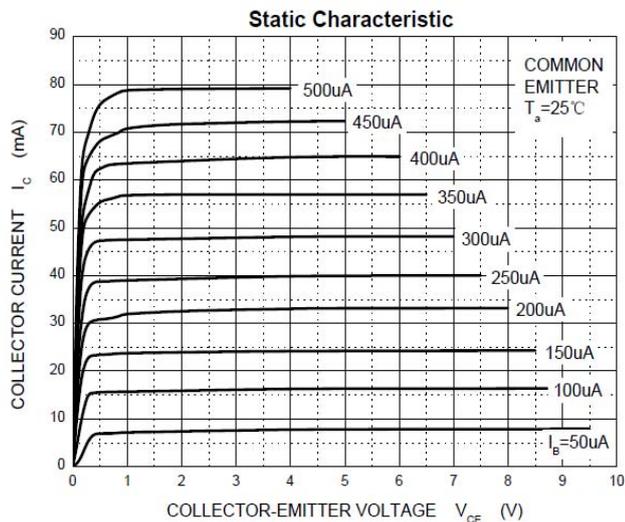
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V _{CB0}	80	V
Collector to Emitter Voltage	V _{CEO}	80	V
Emitter to Base Voltage	V _{EBO}	4	V
Collector Current - Continuous	I _C	500	mA
Collector Power Dissipation	P _C	300	mW
Thermal Resistance From Junction To Ambient	R _{θJA}	416	°C / W
Junction, Storage Temperature	T _J , T _{STG}	150, -55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	V _{(BR)CBO}	80	-	-	V	I _C =0.1mA, I _E =0
Collector to Emitter Breakdown Voltage	V _{(BR)CEO}	80	-	-	V	I _C =1mA, I _B =0
Emitter to Base Breakdown Voltage	V _{(BR)EBO}	4	-	-	V	I _E =0.1mA, I _C =0
Collector cut-off current	I _{CBO}	-	-	0.1	µA	V _{CB} =80V, I _E =0
Collector cut-off current	I _{CES}	-	-	0.1	µA	V _{CE} =60V, I _B =0
Emitter cut-off current	I _{EBO}	-	-	0.1	µA	V _{EB} =3V, I _C =0
DC Current Gain	h _{FE(1)}	100	-	400		V _{CE} =1V, I _C =10mA
	h _{FE(2)}	100	-	-		V _{CE} =1V, I _C =100mA
Collector to Emitter Saturation Voltage	V _{CE(sat)}	-	-	0.25	V	I _C =100mA, I _B =10mA
Base to Emitter Saturation Voltage	V _{BE(sat)}	-	-	1.2	V	I _C =100mA, I _B =10mA
Transition Frequency	f _T	100	-	-	MHz	V _{CE} =2V, I _C =10mA, f=100MHz

CHARACTERISTICS CURVE



CHARACTERISTICS CURVE

