

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

FEATURES

- High Voltage Application
- Telephone Application
- Complementary to MMBPA92-C

MARKING

1D

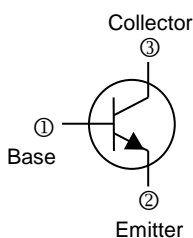
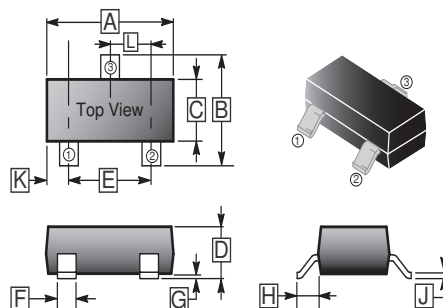
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBPA42-C	Lead (Pb)-free and Halogen-free

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.65	3.10	G	0	0.18
B	2.10	3.00	H	0.55	REF.
C	1.10	1.80	J	0.05	0.26
D	0	1.40	K	0.60	REF.
E	1.70	2.30	L	0.95	TYP.
F	0.28	0.55			

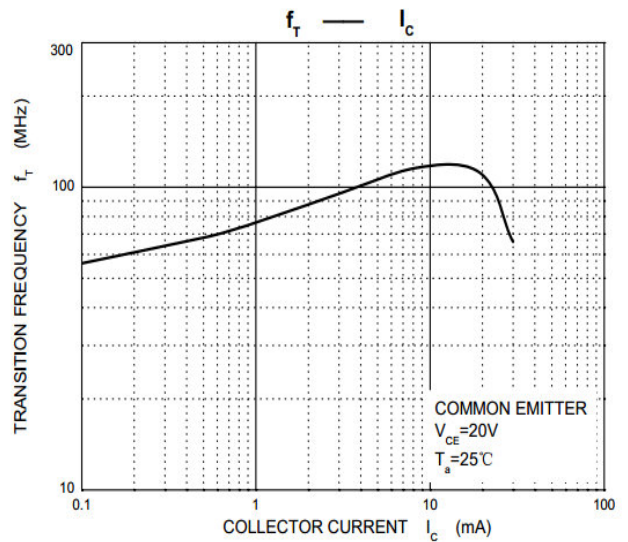
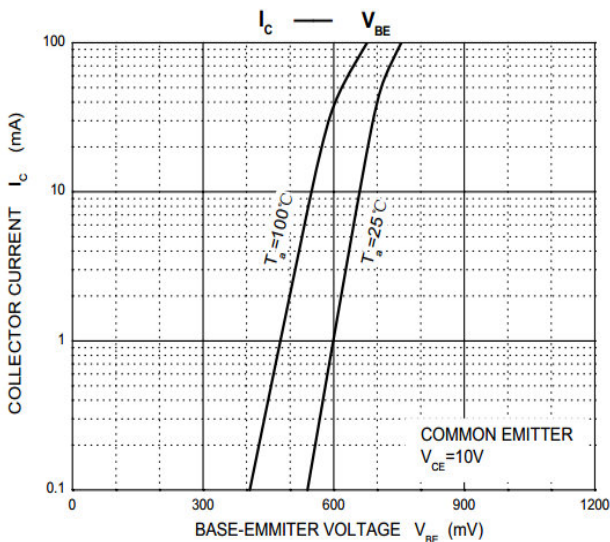
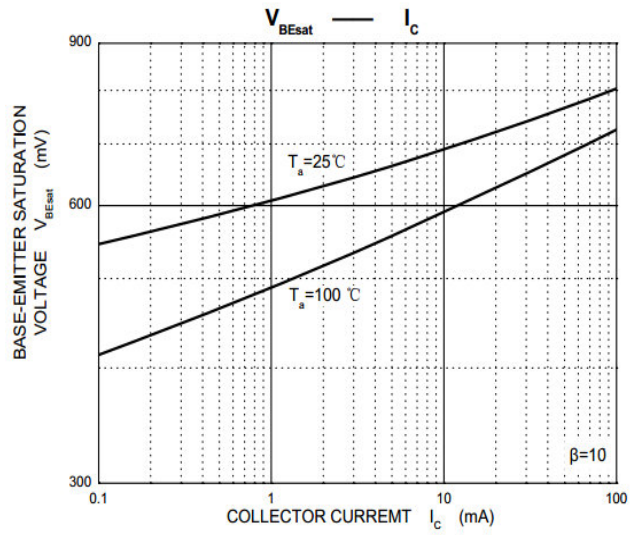
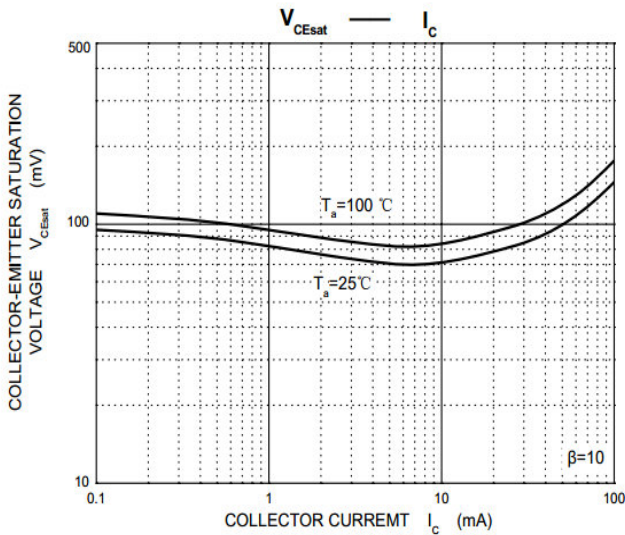
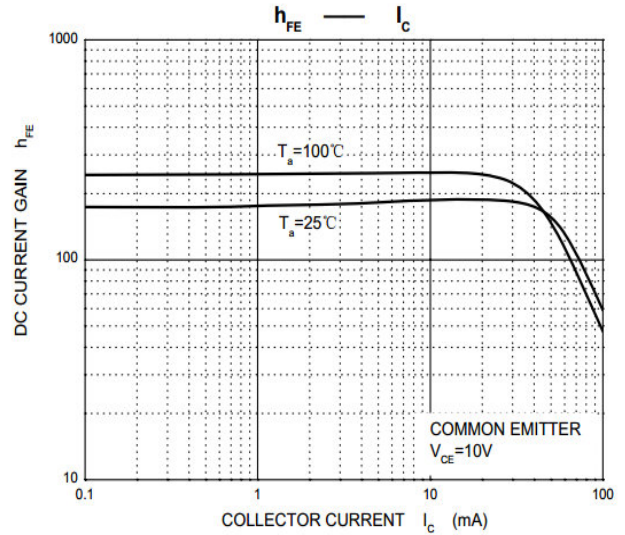
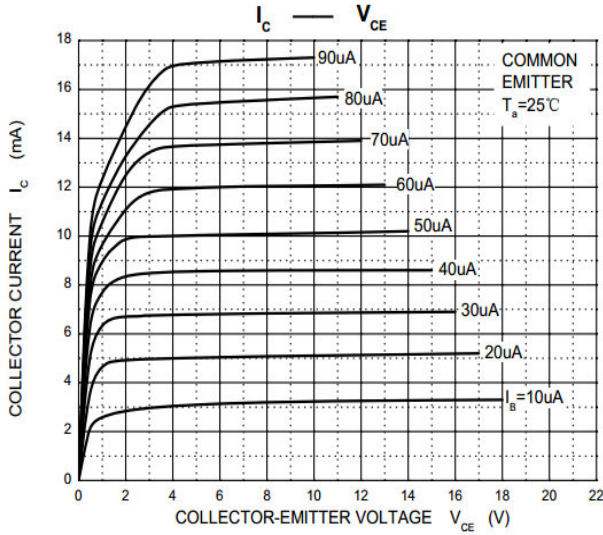
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	300	V
Collector-Emitter Voltage	V _{CEO}	300	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current-Continuous	I _C	0.3	A
Collector Current-Peak	I _{CM}	0.5	A
Collector Power Dissipation	P _C	350	mW
Thermal Resistance from Junction-Ambient	R _{θJA}	357	°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.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CBO}	300	-	V	I _C =0.1mA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	300	-	V	I _C =1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	6	-	V	I _E =0.1mA, I _C =0
Collector Cut-off Current	I _{CB0}	-	0.1	μA	V _{CB} =200V, I _E =0
Emitter Cut-off Current	I _{EBO}	-	0.1	μA	V _{EB} =6V, I _C =0
DC Current Gain	h _{FE}	25	-		V _{CE} =10V, I _C =1mA
		40	-		V _{CE} =10V, I _C =10mA
		40	-		V _{CE} =10V, I _C =30mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	0.5	V	I _C =20mA, I _B =2mA
Base-Emitter Saturation Voltage	V _{BE(sat)}	-	0.9	V	I _C =20mA, I _B =2mA
Transition Frequency	f _T	50	-	MHz	V _{CE} =10V, I _C =20mA, f=100MHz

CHARACTERISTICS CURVE



CHARACTERISTICS CURVE

