

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

FEATURES

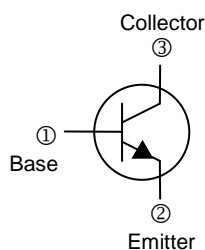
- High Voltage Application
- Telephone Application
- Complementary to MMBTA93

MARKING

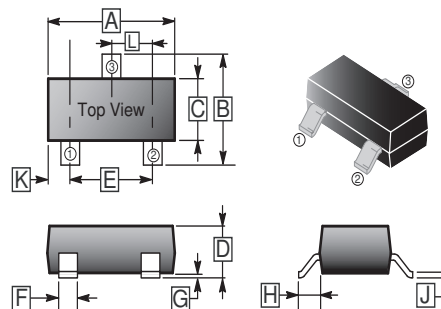
ABX

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 _{CBO}	200	V
Collector to Emitter Voltage	V _{CEO}	200	V
Emitter to Base Voltage	V _{EBO}	5	V
Collector Current - Continuous	I _C	500	mA
Collector Power Dissipation	P _C	350	mW
Thermal Resistance From Junction To 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.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	V _{(BR)CBO}	200	-	-	V	I _C =100μA, I _E =0
Collector to Emitter Breakdown Voltage	V _{(BR)CEO}	200	-	-	V	I _C =1mA, I _B =0
Emitter to Base Breakdown Voltage	V _{(BR)EBO}	5	-	-	V	I _E =100μA, I _C =0
DC Current Gain	h _{FE(1)} ¹	40	-	-		V _{CE} =10V, I _C =10mA
	h _{FE(2)} ¹	40	-	-		V _{CE} =10V, I _C =1mA
	h _{FE(3)} ¹	40	-	-		V _{CE} =10V, I _C =30mA
Collector to Emitter Saturation Voltage	V _{CE(sat)} ¹	-	-	0.5	V	I _C =20mA, I _B =2mA
Base to Emitter Saturation Voltage	V _{BE(sat)} ¹	-	-	0.9	V	I _C =20mA, I _B =2mA
Transition Frequency	f _T	50	-	-	MHz	V _{CE} =20V, I _E =10mA, f=100MHz
Collector output capacitance	C _{ob}	-	-	4	pF	V _{CB} =20V, I _E =0, f=1MHz

Note:

1. Pulse test: pulse width ≤ 300μs, duty cycle ≤ 2.0%.