

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

FEATURES

- Ideal for Medium Power Amplification and Switching
- Complementary to MMBP5401-C

MARKING

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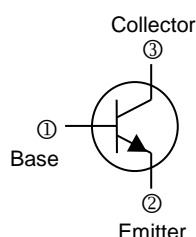
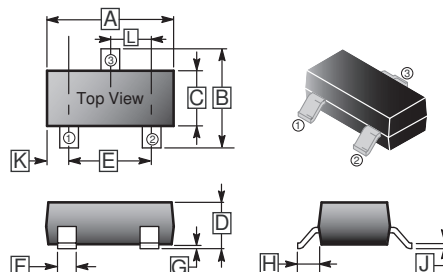
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBP5551-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	0.55 REF.
C	1.10	1.80	J	0.05	0.26
D	0	1.40	K	0	0.60 REF.
E	1.70	2.30	L	0	0.95 TYP.
F	0.28	0.55			

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	180	V
Collector-Emitter Voltage	V _{CEO}	160	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	0.6	A
Collector Power Dissipation	P _C	300	mW
Thermal Resistance from Junction-Ambient	R _{θJA}	416	°C/W
Junction, Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CBO}	180	-	-	V	I _C =100μA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	160	-	-	V	I _C =1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	6	-	-	V	I _E =10μA, I _C =0
Collector Cut-off Current	I _{CBO}	-	-	50	nA	V _{CB} =120V, I _E =0
Emitter Cut-off Current	I _{EBO}	-	-	50	nA	V _{EB} =4V, I _C =0
DC Current Gain ¹	h _{FE}	80	-	-		V _{CE} =5V, I _C =1mA
		100	-	300		V _{CE} =5V, I _C =10mA
		50	-	-		V _{CE} =5V, I _C =50mA
Collector-Emitter Saturation Voltage ¹	V _{CE(sat)}	-	-	0.15	V	I _C =10mA, I _B =1mA
		-	-	0.2		I _C =50mA, I _B =5mA
Base-Emitter Saturation Voltage ¹	V _{BE(sat)}	-	-	1	V	I _C =10mA, I _B =1mA
		-	-	1		I _C =50mA, I _B =5mA
Transition Frequency	f _T	100	-	300	MHz	V _{CE} =10V, I _C =10mA, f=100MHz
Collector Output Capacitance	C _{ob}	-	-	6	pF	V _{CB} =10V, I _E =0, f=1MHz

Note:

1. Pulse test: pulse width ≤ 300μs, duty cycle ≤ 2%.

TYPICAL CHARACTERISTICS

