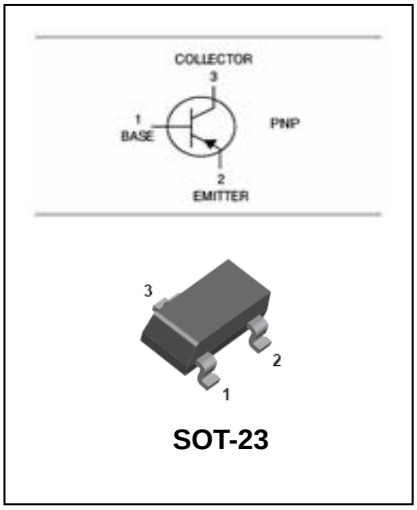
PNP General Purpose Transistor MMBTA63/MMBTA64

FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available (MMBTA13/MMBTA14).
- High current gain.

Lead-free



SOT-23

APPLICATIONS

- Ideal for medium power amplification and switching

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBTA63	2U	SOT-23
MMBTA64	2V	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter		Value	UNIT
V_{CBO}	collector-base voltage	MMBTA63 MMBTA64	-30 -30	V
V_{CEO}	collector-emitter voltage	MMBTA63 MMBTA64	-30 -30	V
V_{EBO}	emitter-base voltage		-10	V
I_C	collector current (DC)		-0.3	A
P_C	Collector dissipation		0.3	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient		417	°C/W
T_j , T_{stg}	junction and storage temperature		-55-150	°C

PNP General Purpose Transistor MMBTA63/MMBTA64

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage MMBTA63 MMBTA64	I_C=-100μA,I_E=0	 -30 -30	-	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage MMBTA63 MMBTA64	I_C=-0.1mA,I_B=0	 -30 -30	-	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-100μA,I_C=0	-10	-	V
I_{CBO}	collector cut-off current	I_E = 0; V_{CB} = -30V	-	-0.1	μA
I_{CEO}	collector cut-off current	I_E = 0; V_{CE} = -10V	-	-0.1	μA
I_{EBO}	Emitter cut-off current	I_C= 0; V_{EB} = -10V	-	-0.1	μA
h_{FE}	DC current gain MMBTA63 MMBTA64 MMBTA63 MMBTA64	V_{CE} = -5V; I_C= -10mA V_{CE} = -5V;I_C = -10mA V_{CE} = -5V;I_C = -100mA V_{CE} = -5V;I_C =-100mA	5000 10000 10000 20000	-	
$V_{CE(sat)}$	collector-emitter saturation voltage	I_C = -100mA; I_B =-0.1mA	-	-1.5	V
$V_{BE(on)}$	base-emitter on voltage	I_C = -100mA; V_{CE}=-5.0V	-	-2.0	V
f_T	transition frequency	I_C =-10mA; V_{CE} =-5.0V; f =100MHz	125	-	MHz

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

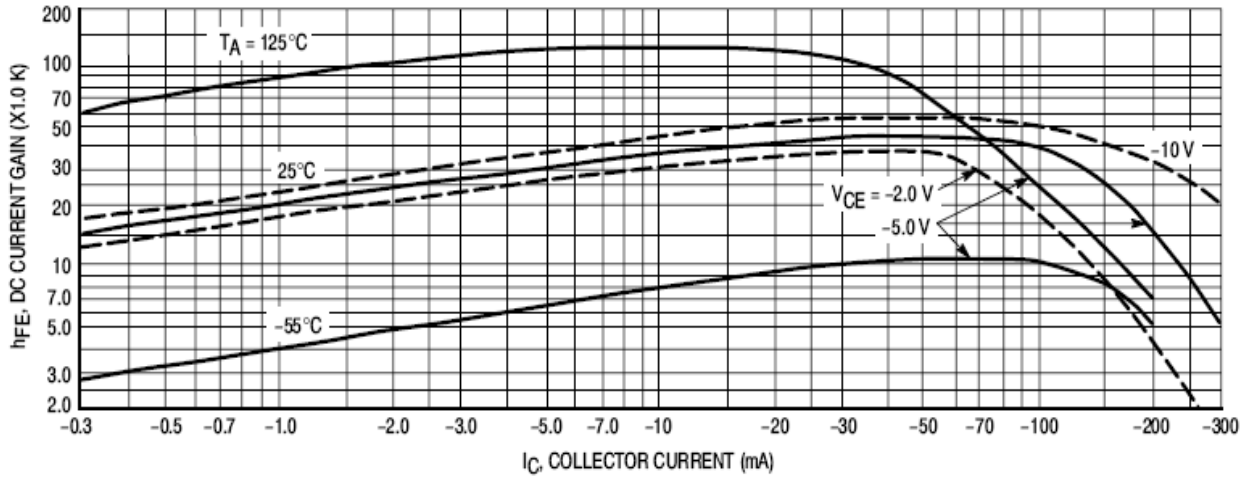


Figure 1. DC Current Gain

PNP General Purpose Transistor MMBTA63/MMBTA64

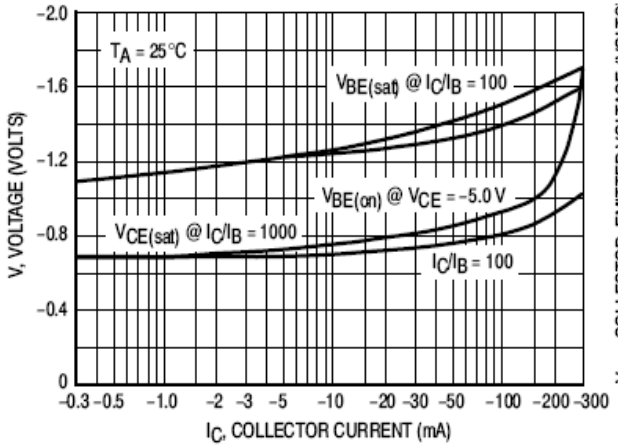


Figure 3. "On" Voltage

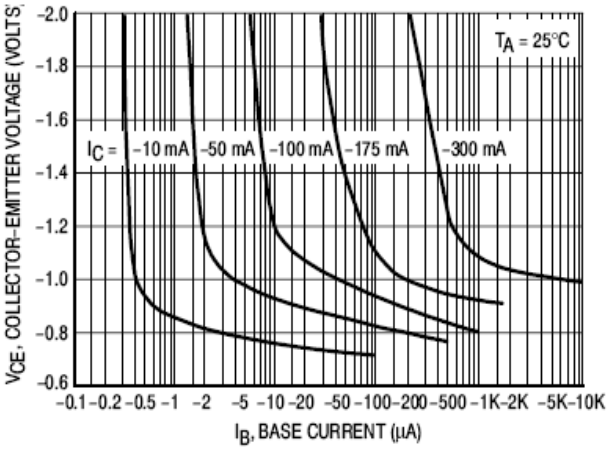


Figure 2. Collector Saturation Region

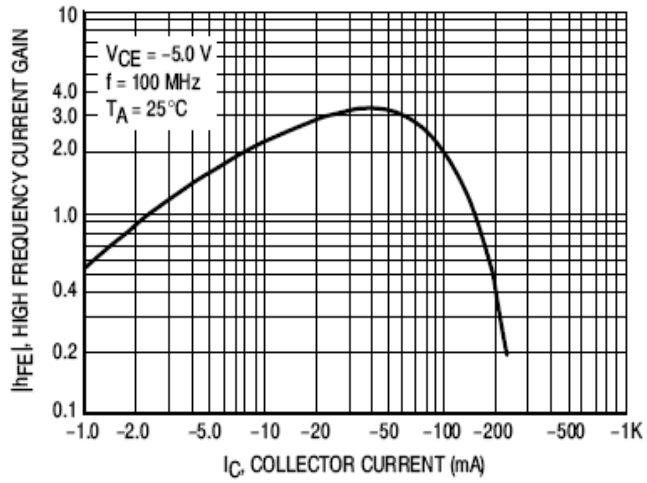
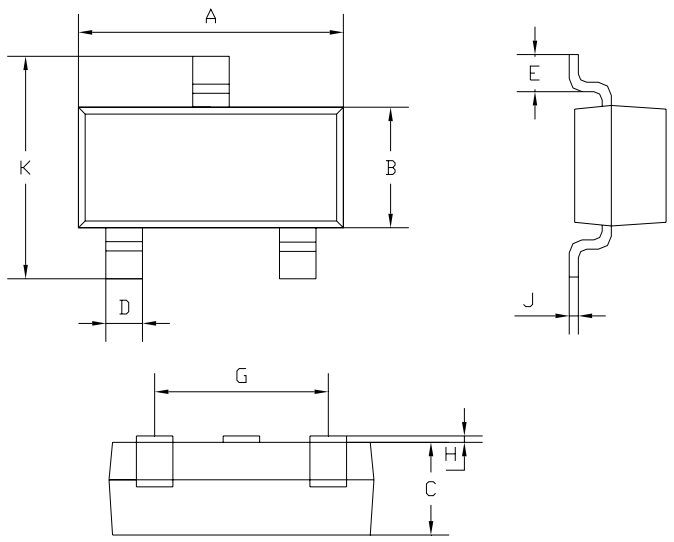


Figure 4. High Frequency Current Gain

PNP General Purpose Transistor MMBTA63/MMBTA64

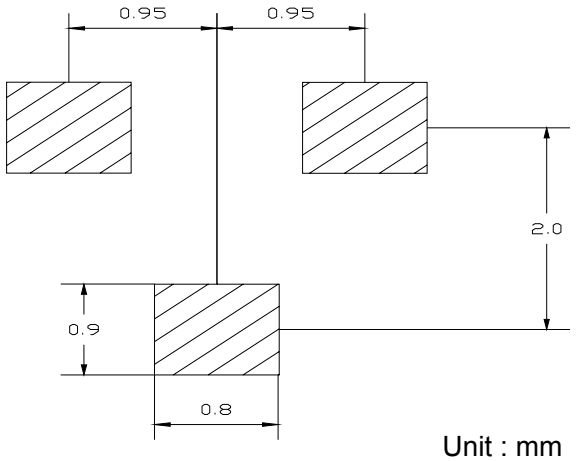
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBTA63/MMBTA64	SOT-23	3000/Tape&Reel