

PNP General Purpose Transistor

MMBTA55/A56

FEATURES

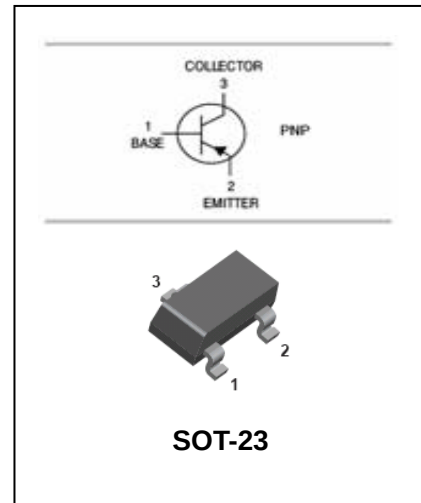
- Epitaxial planar die construction.
- Complementary NPN types available (MMBTA05/MMBTA06)



Lead-free

APPLICATIONS

- Ideal for medium NPN amplification and switching.



ORDERING INFORMATION

Type No.	Marking	Package Code
MMBTA55	2H	SOT-23
MMBTA56	2GM	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	MMBTA55	MMBTA56	UNIT
V _{CBO}	collector-base voltage	-60	-80	V
V _{CEO}	collector-emitter voltage	-60	-80	V
V _{EBO}	emitter-base voltage	-4		V
I _C	collector current (DC)	-0.5		A
P _C	Collector dissipation	0.35		W
R _{θJA}	Thermal Resistance, Junction to Ambient	357		°C/W
T _J , T _{stg}	junction and storage temperature	-55-150		°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage MMBTA55 MMBTA56	$I_C = -100\mu A, I_E = 0$	-60 -80		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage MMBTA55 MMBTA56	$I_C = -10mA, I_B = 0$	-80 -80		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -100\mu A, I_C = 0$	-4		V
I_{CBO}	collector cut-off current MMBTA55 MMBTA56	$I_E = 0; V_{CB} = -60V$ $I_E = 0; V_{CB} = -80V$	-	-0.1	μA
I_{CEO}	collector cut-off current MMBTA55 MMBTA56	$I_B = 0; V_{CB} = -60V$ $I_B = 0; V_{CB} = -80V$	-	-0.1	μA
h_{FE}	DC current gain	$V_{CE} = -1V; I_C = -10mA$ $V_{CE} = -1V; I_C = -100mA$	100 100	- -	
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C = -100mA; I_B = -10mA$	-	-0.25	V
$V_{BE(sat)}$	base-emitter saturation voltage	$I_C = -100mA; V_{CE} = -1.0V$	-	-1.2	V
f_T	transition frequency	$I_C = -100mA; V_{CE} = -1V;$ $f = 100MHz$	50	-	MHz

PACKAGE OUTLINE

Plastic surface mounted package

SOT-23

Top view of the SOT-23 package. Dimension A is the total width. Dimension B is the width of the central body. Dimension D is the width of the individual leads. Dimension K is the total height from the base of the leads to the top of the package body.

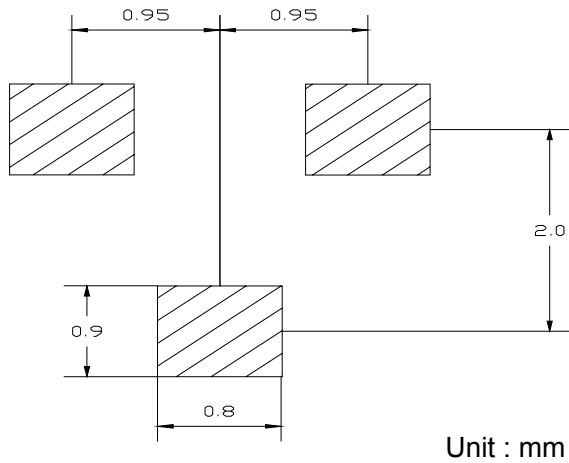
Bottom view of the SOT-23 package. Dimension C is the height of the package body from the base of the leads. Dimension G is the distance between the centers of the two leads. Dimension H is the height of the lead from the base of the package body.

Side view of the SOT-23 package. Dimension E is the height of the lead from the base of the package body. Dimension J is the distance from the base of the package body to the top of the lead.

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		

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SOLDERING FOOTPRINT**PACKAGE INFORMATION**

Device	Package	Shipping
MMBTA55/MMBTA56	SOT-23	3000/Tape&Reel