

## PNP General Purpose Transistor

## MMBTA55/A56

### FEATURES

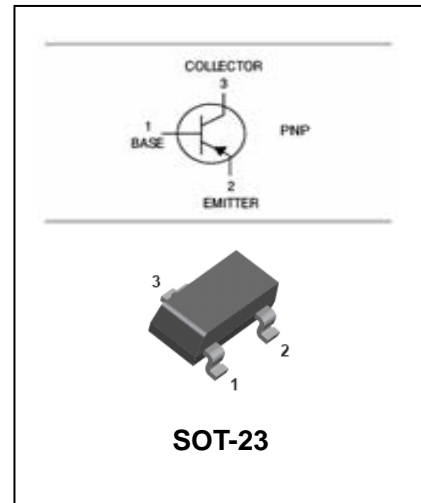
- Epitaxial planar die construction.
- Complementary NPN types available (MMBTA05/MMBTA06)



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 <sub>CBO</sub>	collector-base voltage	-60	-80	V
V <sub>CEO</sub>	collector-emitter voltage	-60	-80	V
V <sub>EBO</sub>	emitter-base voltage	-4		V
I <sub>C</sub>	collector current (DC)	-0.5		A
P <sub>C</sub>	Collector dissipation	0.3		W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	417		°C/W
T <sub>J</sub> , T <sub>stg</sub>	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	$I_C = -1.0mA, I_B = 0$	-60 -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	$\mu A$
$I_{CEO}$	collector cut-off current MMBTA55 MMBTA56	$I_B = 0; V_{CB} = -60V$ $I_B = 0; V_{CB} = -80V$	-	-0.1	$\mu A$
$h_{FE}$	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

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		

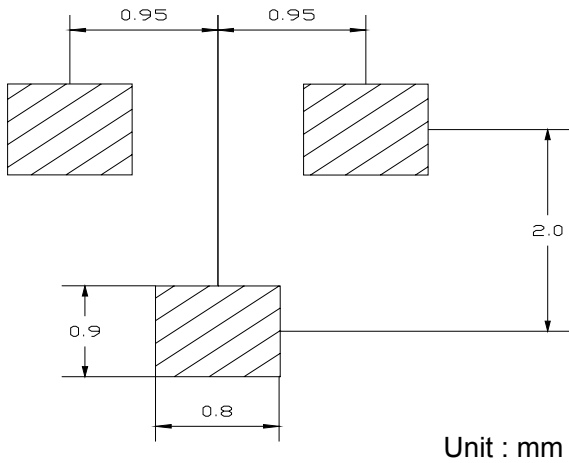
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### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

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