

PNP General Purpose Transistor

MMBTA55/A56

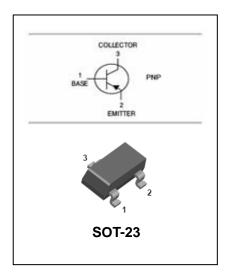
FEATURES

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



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	А
Pc	Collector dissipation	0	.3	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	4	17	°C/W
T_{j} , T_{stg}	junction and storage temperature	-55 to	+150	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25 $^{\circ}$ C unless otherwise specified

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
	Collector-base breakdown voltage				
$V_{(BR)CBO}$	MMBTA55	I_{C} =-100 μ A, I_{E} =0	-60		V
	MMBTA56		-80		
Collector-emitter breakdown voltage					
$V_{(BR)CEO}$	MMBTA55	I_{C} =-1.0mA, I_{B} =0	-60		V
	MMBTA56		-80		
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I _E =-100μA,I _C =0	-4		V
ı	Collector cut-off current MMBTA55	I _E = 0; V _{CB} = -60V		-0.1	
I _{CBO}	MMBTA56	$I_E = 0$; $V_{CB} = -80V$	-	-0.1	μA
loso	Collector cut-off current MMBTA55	$I_B = 0$; $V_{CB} = -60V$	_	-0.1	μA
I _{CEO}	MMBTA56	$I_B = 0$; $V_{CB} = -80V$		-0.1	μΛ
h _{FE} DC current gain	DC current gain	$V_{CE} = -1V; I_{C} = -10mA$	100	-	
''FE	BO carrent gain	$V_{CE} = -1V; I_{C} = -100 \text{mA}$	100	-	
$V_{\text{CE}(\text{sat})}$	Collector-emitter saturation voltage	$I_C = -100 \text{mA}; I_B = -10 \text{mA}$	-	-0.25	V
$V_{BE(on)}$	Base-emitter saturation voltage	$I_C = -100$ mA; $V_{CE} = -1.0$ V	-	-1.2	V
f⊤	transition frequency	$I_C = -100 \text{mA}; V_{CE} = -1V;$ f = 100MHz	50	-	MHz



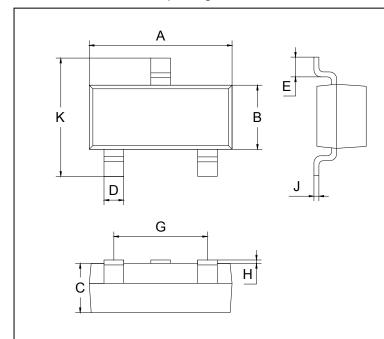
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PACKAGE OUTLINE

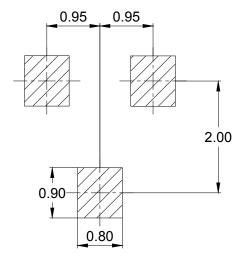
Plastic surface mounted package

SOT-23



SOT-23		
Dim	Min	Max
Α	2.70	3.10
В	1.10	1.50
С	1.0 Typical	
D	0.4 Typical	
Е	0.35	0.48
G	1.80	2.00
Н	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

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