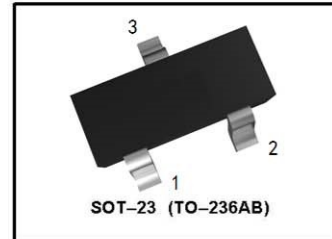
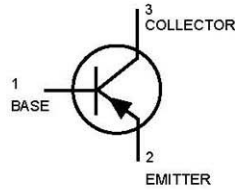


PNP Silicon



● MAXIMUM RATINGS

Rating	Symbol	Value		Unit
		MMBTA55	MMBTA56	
Collector-Emitter Voltage	V_{CEO}	-60	-80	Vdc
Collector-Base Voltage	V_{CBO}	-60	-80	Vdc
Emitter-Base Voltage	V_{EBO}	-4.0		Vdc
Collector Current — Continuous	I_C	-500		mAdc

● THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board, (1) $T_A = 25^\circ\text{C}$	P_D	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C/W}$
Total Device Dissipation Alumina Substrate, (2) $T_A = 25^\circ\text{C}$	P_D	300	mW
Derate above 25°C		2.4	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

● DEVICE MARKING

MMBTA55 = 2H; MMBTA56 = 2GM

● ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted.)

Characteristic	Symbol	Min	Max	Unit
----------------	--------	-----	-----	------

OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage (3) ($I_C = -1.0\text{ mAdc}, I_B = 0$)	$V_{(BR)CEO}$			Vdc
	MMBTA55	-60	—	
	MMBTA56	-80	—	
Emitter-Base Breakdown Voltage ($I_E = -100\ \mu\text{Adc}, I_C = 0$)	$V_{(BR)EBO}$	-4.0	—	Vdc
Collector Cutoff Current ($V_{CE} = -60\text{Vdc}, I_B = 0$)	I_{CEO}	—	-0.1	μAdc
Collector Cutoff Current ($V_{CB} = -60\text{Vdc}, I_E = 0$)	I_{CBO}	—	-0.1	μAdc
	MMBTA55	—	-0.1	
	MMBTA56	—	-0.1	

1. FR-5 = 1.0 x 0.75 x 0.062 in.

2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

3. Pulse Test: Pulse Width $\leq 300\ \mu\text{s}$, Duty Cycle $\leq 2.0\%$.

● **ELECTRICAL CHARACTERISTICS** ($T_A = 25^\circ\text{C}$ unless otherwise noted) (Continued)

Characteristic	Symbol	Min	Max	Unit
----------------	--------	-----	-----	------

ON CHARACTERISTICS

DC Current Gain ($I_C = -10\text{ mAdc}$, $V_{CE} = -1.0\text{ Vdc}$) ($I_C = -100\text{ mAdc}$, $V_{CE} = -1.0\text{ Vdc}$)	h_{FE}	100 100	— —	—
Collector–Emitter Saturation Voltage ($I_C = -100\text{ mAdc}$, $I_B = -10\text{ mAdc}$)	$V_{CE(sat)}$	—	-0.25	Vdc
Base–Emitter On Voltage ($I_C = -100\text{ mAdc}$, $V_{CE} = -1.0\text{ Vdc}$)	$V_{BE(on)}$	—	-1.2	Vdc

● **SMALL–SIGNAL CHARACTERISTICS**

Current–Gain–Bandwidth Product(4) ($V_{CE} = -1.0\text{ Vdc}$, $I_C = -100\text{ mAdc}$, $f = 100\text{ MHz}$)	f_T	50	—	MHz
---	-------	----	---	-----

4. f_T is defined as the frequency at which $|h_{fe}|$ extrapolates to unity.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Shikues manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)
[NTE195A](#) [NTE92](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [2SC4731T-AY](#) [FJPF5304DTU](#)
[2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SB1324-TD-E](#) [2SC2412KT146S](#) [2SC3902S](#) [2SC5231C8-TL-E](#) [2SD1685F](#) [CPH6501-TL-](#)
[E](#) [MCH4021-TL-E](#) [MJE340](#) [Jantx2N5416](#) [US6T6TR](#) [NJL0281DG](#) [732314D](#) [CPH3121-TL-E](#) [CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#)
[UMX21NTR](#) [MCH6102-TL-E](#) [NJL0302DG](#) [TTA1452B,S4X\(S](#) [2N3879](#) [NTE13](#) [NTE26](#) [NTE282](#) [NTE323](#) [NTE350](#)