

## MMBTA55-A56

### PNP General Purpose Transistor

### Features

- Epitaxial planar die construction.
- Complementary PNP type

available (MMBTA55/MMBTA56).

- Low collector-emitter saturation voltage.
- RoHS compliant package

### Application

- Ideal for medium PNP amplification and switching.
- Case : SOT-23

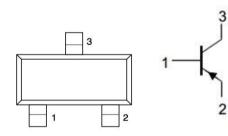
### Packing & Order Information

3,000/Reel

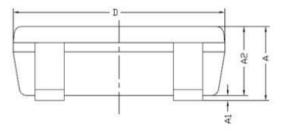


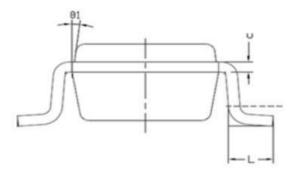


Graphic symbol



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Cumbal	MILLIMETERS		
Symbol	MIN	MAX	
Α	0.8	1.2	
A1	0	0.1	
A2	0.7	1.1	
b	0.3	0.5	
С	0.1	0.2	
D	2.7	3.1	
E	2.6	3	
E1	1.4	1.8	
е	0.95 BSC		
e1	1.9 BSC		
L	0.3	0.6	
θ1	7° NOM		



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### PNP General Purpose Transistor MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATING @ Ta=25°C unless otherwise specified							
Symbol	Parameter	MMBTA55	MMBTA56	Unit			
V <sub>CBO</sub>	Collector-Base Voltage	-60	-80	V			
VCEO	Collector-Emitter Voltage	-80	-80	V			
Vebo	Emitter-Base Voltage	-4		V			
IC	collector current (DC)	-0.5		А			
Pc	Collector Dissipation	-0.3		W			
Reja	Thermal resistance junction to ambient	417		°C/W			
Tj,Ts tg	Junction and Storage Temperature	-55 to +150		°C			

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

ELECTRI	ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified							
Symbol	Parameter	Test Conditions	MIN	MAX	UNIT			
V <sub>(BR)</sub> CBO	Collector-base breakdown voltage (MMBTA55)		-60		v			
	Collector-base breakdown voltage (MMBTA56)	$I_C = -100 \mu A$ , $I_E = 0$	-80					
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage(MMBTA55)		-60		V			
	Collector-emitter breakdown voltage(MMBTA56)	$I_{\rm C} = -1.0 {\rm mA}$ , $I_{\rm B} = 0$	-80					
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	$I_E=100\mu A$ , $I_C=0$	-4		v			
I <sub>CBO</sub>	Collector cut-off current (MMBTA55)	$V_{CB} = -60 V$ , $I_E = 0$	-0.1		•			
	Collector cut-off current (MMBTA56)	$V_{CB} = -80 V$ , $I_E = 0$			μA			
I <sub>CEO</sub>	Collector cut-off current (MMBTA55)	$V_{CB} = -60 V$ , $I_B = 0$	-0.1					
	Collector cut-off current (MMBTA56)	$V_{CB} = -80 \ V \ , \ I_B = 0$		-0.1	μA			
h <sub>FE</sub>	DC current gain	$V_{CE} = -1 V$ , $I_C = -10 mA$	100					
		$V_{CE} = -1 V$ , $I_C = -100 mA$	100		-			
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	$I_{C} = -100 \text{mA}$ , $I_{B} = -10 \text{mA}$		-0.25	v			
V <sub>BE(ON)</sub>	Base-emitter voltage	$I_{C} = -100 \text{mA}$ , $I_{CE} = -1.0 \text{ V}$		-1.2	v			
fr	Transition frequency	$V_{CE} = -1 V$ , $I_C = -100 mA$	50		MHz			
		f = 100MHz	50					



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PNP General Purpose Transistor

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