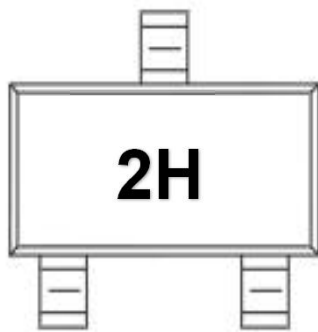


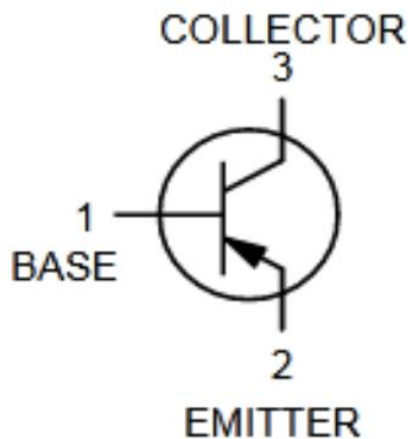
# MMBTA55

## TRANSISTOR (PNP)

### MARKING:



### Equivalent Circuit:



### SOT-23



### FEATURES:

- ※ Collector Current Capability  $I_C = -0.5A$
- ※ Collector Emitter Voltage  $V_{CEO} = -60V$

### MAXIMUM RATINGS ( $T_a = 25^\circ C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	<b>VCBO</b>	-60	<b>V</b>
Collector-Emitter Voltage	<b>VCEO</b>	-60	<b>V</b>
Emitter-Base Voltage	<b>VEBO</b>	-4	<b>V</b>
Collector Current	<b>IC</b>	-500	<b>mA</b>
Collector Power Dissipation	<b>PC</b>	225	<b>mW</b>
Thermal Resistance From Junction To Ambient	<b>RθJA</b>	556	<b>°C/W</b>
Junction Temperature	<b>Tj</b>	150	<b>°C</b>
Storage Temperature	<b>Tstg</b>	-55~+150	<b>°C</b>

# MMBTA55

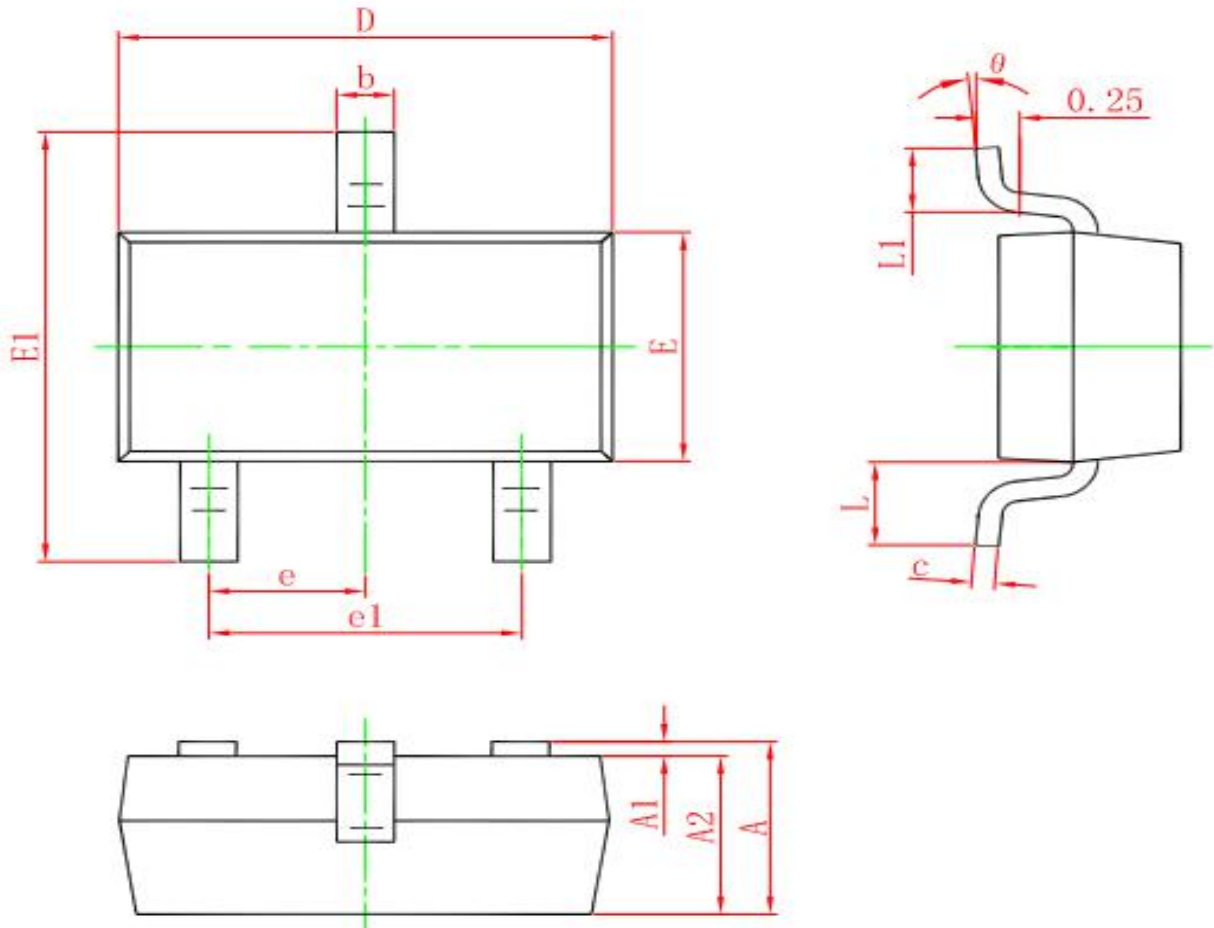
## ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	<b>V(BR)CBO</b>	IC= -100μA, IE=0	-60			<b>V</b>
Collector-emitter breakdown voltage	<b>V(BR)CEO</b>	IC= -1mA, IB=0	-60			<b>V</b>
Emitter-base breakdown voltage	<b>V(BR)EBO</b>	IE=-100μA, IC=0	-4			<b>V</b>
Collector cut-off current	<b>ICBO</b>	VCB=-60 V , IE=0			-0.1	<b>μA</b>
Collector cut-off current	<b>ICEO</b>	VCB=-60V , IE=0			-1	<b>μA</b>
Emitter cut-off current	<b>IEBO</b>	VEB= -4V , IC=0			-0.1	<b>μA</b>
DC current gain	<b>hFE</b>	VCE=-1V, IC= -10mA	100		400	
	<b>hFE</b>	VCE=-1V, IC= -100mA	100			
Collector-emitter saturation voltage	<b>VCE(sat)</b>	IC=-100 mA, IB= -10mA			-0.25	<b>V</b>
Base-emitter saturation voltage	<b>VBE(sat)</b>	VCE=-1V, IC=-100mA			-1.2	<b>V</b>
Transition frequency	<b>fT</b>	VCE=-1V, IC= -100mA f=100MHz	50			<b>MHz</b>

Note. Pulse Test: Pulse Width ≤300 us, Duty Cycle ≤2.0%

# MMBTA55

## SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°