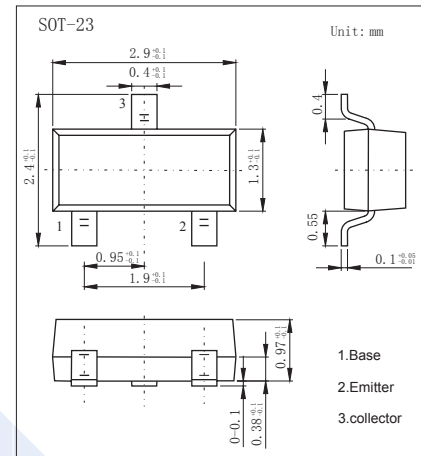


## NPN Transistors

### MMBT5550 (KMBT5550)

#### ■ Features

- Collector Current Capability  $I_C=0.6A$
- Collector Emitter Voltage  $V_{CE0}=140V$
- High Voltage Transistor



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	160	V
Collector - Emitter Voltage	$V_{CEO}$	140	
Emitter - Base Voltage	$V_{EBO}$	6	
Collector Current - Continuous	$I_C$	0.6	A
Collector Power Dissipation	$P_C$	225	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	556	$^\circ C/W$
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C = 100 \mu A, I_E = 0$	160			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = 1 mA, I_B = 0$	140			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = 100 \mu A, I_C = 0$	6			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 100 V, I_E = 0$			100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10 mA, I_B = 1 mA$			0.15	V
		$I_C = 50 mA, I_B = 5 mA$			0.25	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10 mA, I_B = 1 mA$			1	
		$I_C = 50 mA, I_B = 5 mA$			1.2	
DC current gain	$h_{FE}$	$V_{CE} = 5V, I_C = 1 mA$	60			
		$V_{CE} = 5V, I_C = 10 mA$	60		250	
		$V_{CE} = 5V, I_C = 50 mA$	20			

Note.: Pulse test: pulse width  $\leq 300 \mu s$ , duty cycle  $\leq 2.0\%$ .

#### ■ Marking

Marking	M1F
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