

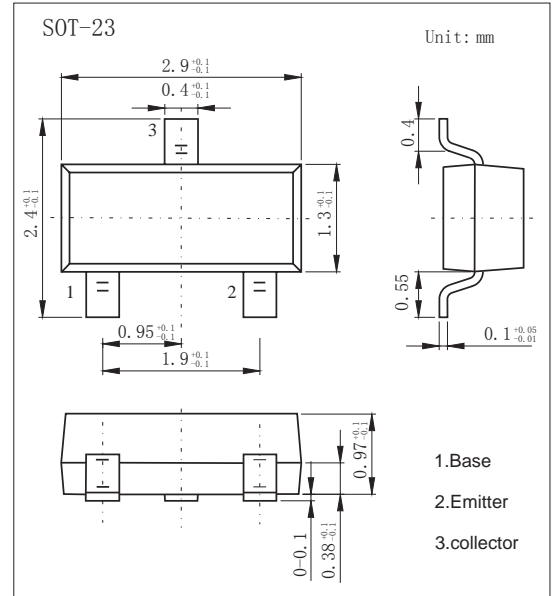
## SOT-23 Plastic-Encapsulate Transistors

### Features

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

### MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	160	V
Collector - Emitter Voltage	$V_{CE0}$	140	
Emitter - Base Voltage	$V_{EB0}$	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	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
MMBT5550	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c= 100 \mu A, I_E= 0$	160			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c= 1 mA, I_B= 0$	140			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E= 100 \mu A, I_C= 0$	6			
Collector-base cut-off current	$I_{CB0}$	$V_{CB}= 100 V, I_E= 0$			100	nA
Emitter cut-off current	$I_{EB0}$	$V_{EB}= 4V, I_C=0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=10 mA, I_B=1mA$			0.15	V
		$I_c=50 mA, I_B=5mA$			0.25	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c=10 mA, I_B=1mA$			1	
		$I_c=50 mA, I_B=5mA$			1.2	
DC current gain	$h_{FE}$	$V_{CE}= 5V, I_c= 1mA$	60			
		$V_{CE}= 5V, I_c= 10mA$	60		250	
		$V_{CE}= 5V, I_c= 50mA$	20			

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

### Marking

Marking	M1F
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