

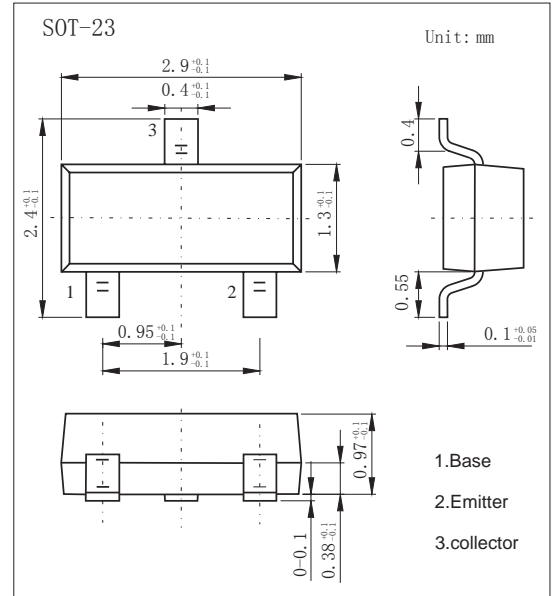
SOT-23 Plastic-Encapsulate Transistors

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}	$I_c=1mA, I_B=0$	140			
Emitter - base breakdown voltage	V_{EB0}	$I_E=100\mu A, I_C=0$	6			
Collector-base cut-off current	I_{CB0}	$V_{CB}=100V, I_E=0$			100	nA
Emitter cut-off current	I_{EB0}	$V_{EB}=4V, I_C=0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=10mA, I_B=1mA$			0.15	V
		$I_c=50mA, I_B=5mA$			0.25	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c=10mA, I_B=1mA$			1	
		$I_c=50mA, I_B=5mA$			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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