



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## SOT-23 Plastic-Encapsulate Transistors

### MMBT5551LT1 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

 $P_{CM}$ : 0.3 W (Tamb=25°C)

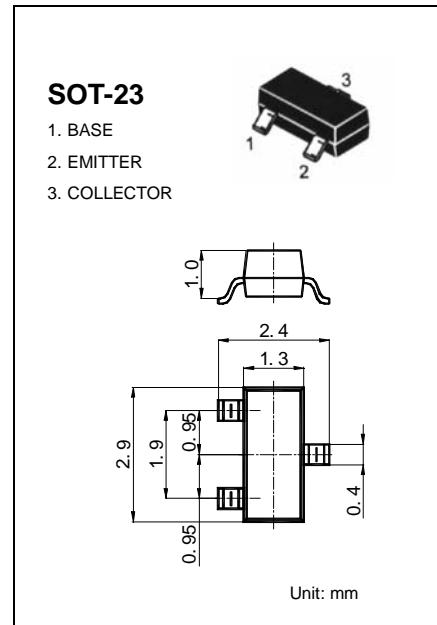
Collector current

 $I_{CM}$ : 0.6 A

Collector-base voltage

 $V_{(BR)CBO}$ : 180 V

Operating and storage junction temperature range

 $T_J, T_{stg}$ : -55°C to +150°C

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	180		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1mA, I_B = 0$	160		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	6		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 180V, I_E = 0$		0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$		0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = 5V, I_C = 1mA$	80		
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 10mA$	80	250	
	$h_{FE(3)}$	$V_{CE} = 5V, I_C = 50mA$	30		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50mA, I_B = 5mA$		0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 50mA, I_B = 5mA$		1	V
Transition frequency	$f_T$	$V_{CE} = 10V, I_C = 10mA, f = 100MHz$	80		MHz

#### DEVICE MARKING

MMBT5551LT1=G1