



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

FMMT591 TRANSISTOR (PNP)

FEATURES

Power dissipation

P_{CM} : 0.5 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : -1 A

Collector-base voltage

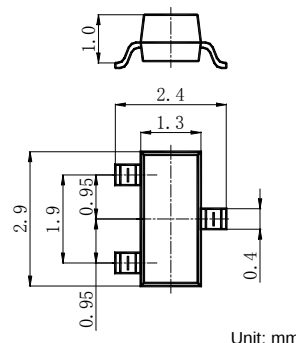
$V_{(BR)CBO}$: -80 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



MARKING:591

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^1$	$I_C=-10mA, I_B=0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-60V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4V, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-5V, I_C=-1mA$	100			
	$h_{FE(2)}^1$	$V_{CE}=-5V, I_C=-500mA$	100		300	
	$h_{FE(3)}^1$	$V_{CE}=-5V, I_C=-1A$	80			
	$h_{FE(4)}^1$	$V_{CE}=-5V, I_C=-2A$	15			
Collector-emitter saturation voltage	$V_{CE(sat)1}^1$	$I_C=-500mA, I_B=-50mA$			-0.3	V
	$V_{CE(sat)2}^1$	$I_C=-1A, I_B=-100mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}^1$	$I_C=-1A, I_B=-100mA$			-1.2	V
Base-emitter voltage	V_{BE}^1	$V_{CE}=-5V, I_C=-1A$			-1	V
Transition frequency	f_T	$V_{CE}=-10V, I_C=-50mA, f=100MHz$	150			MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V, f=1MHz$			10	pF

¹Measured under pulsed conditions, Pulse width=300 μs , Duty cycle $\leq 2\%$.

Typical Characteristics

FMMT591

