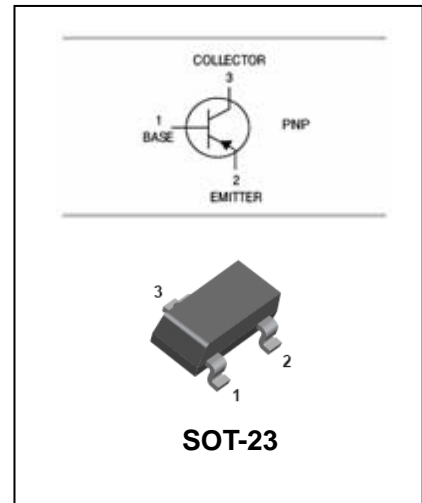


## PNP Silicon Epitaxial Planar Transistor

## FMMT591

### FEATURES

- High saturation voltage.
- Complementary To FMMT491.
- Excellent  $H_{FE}$  Linearity.



### APPLICATIONS

- Switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
FMMT591	591	SOT-23

### MAXIMUM RATING @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-1000	mA
$P_C$	Collector Dissipation	500	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^{\circ}\text{C}$

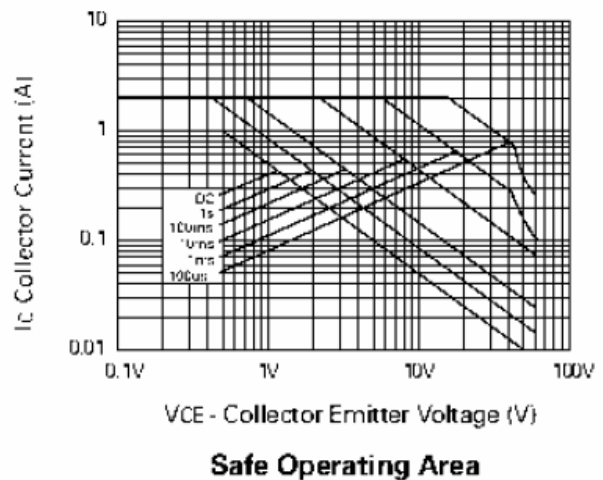
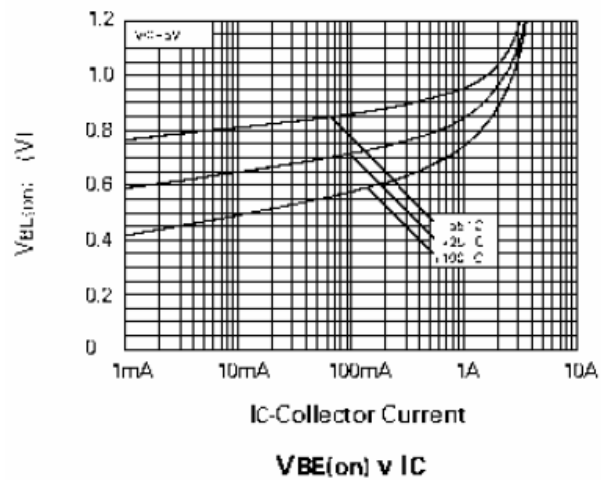
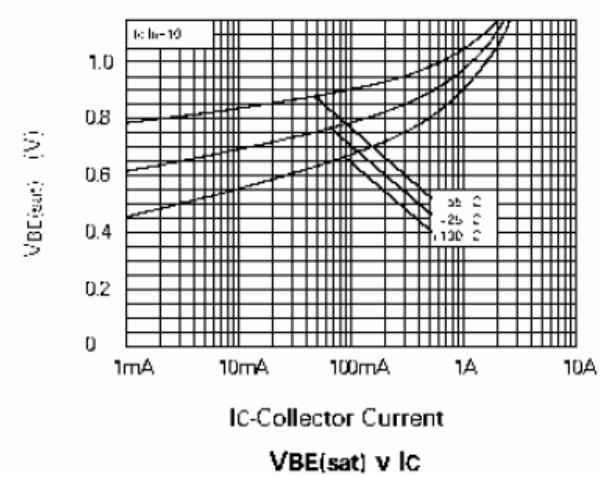
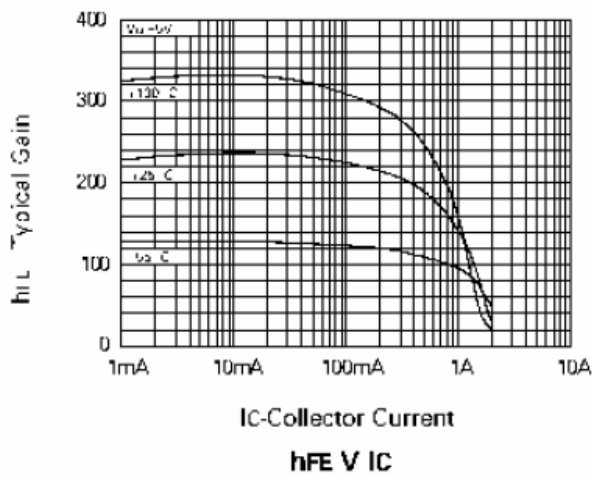
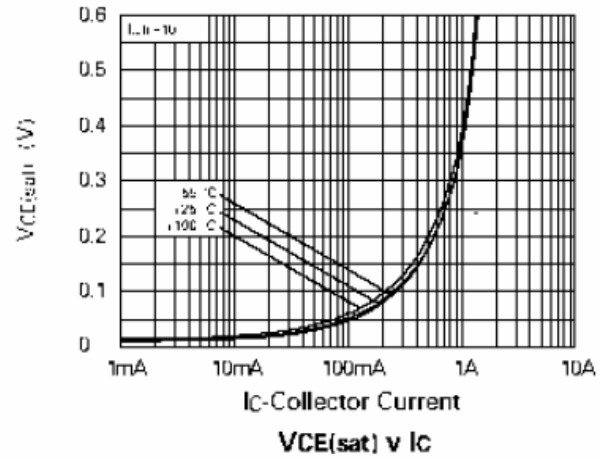
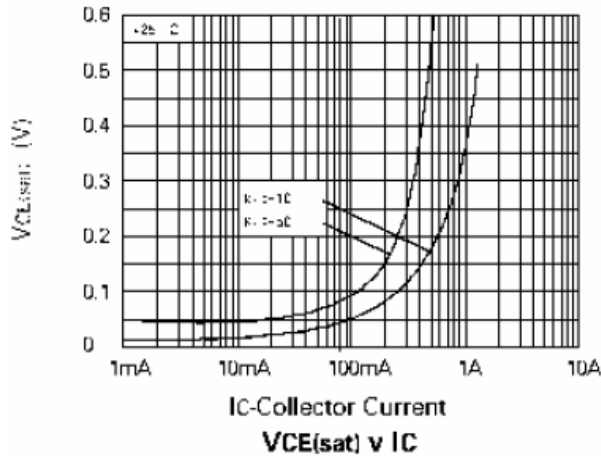
**PNP Silicon Epitaxial Planar Transistor****FMMT591****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

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

## PNP Silicon Epitaxial Planar Transistor

## FMMT591

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



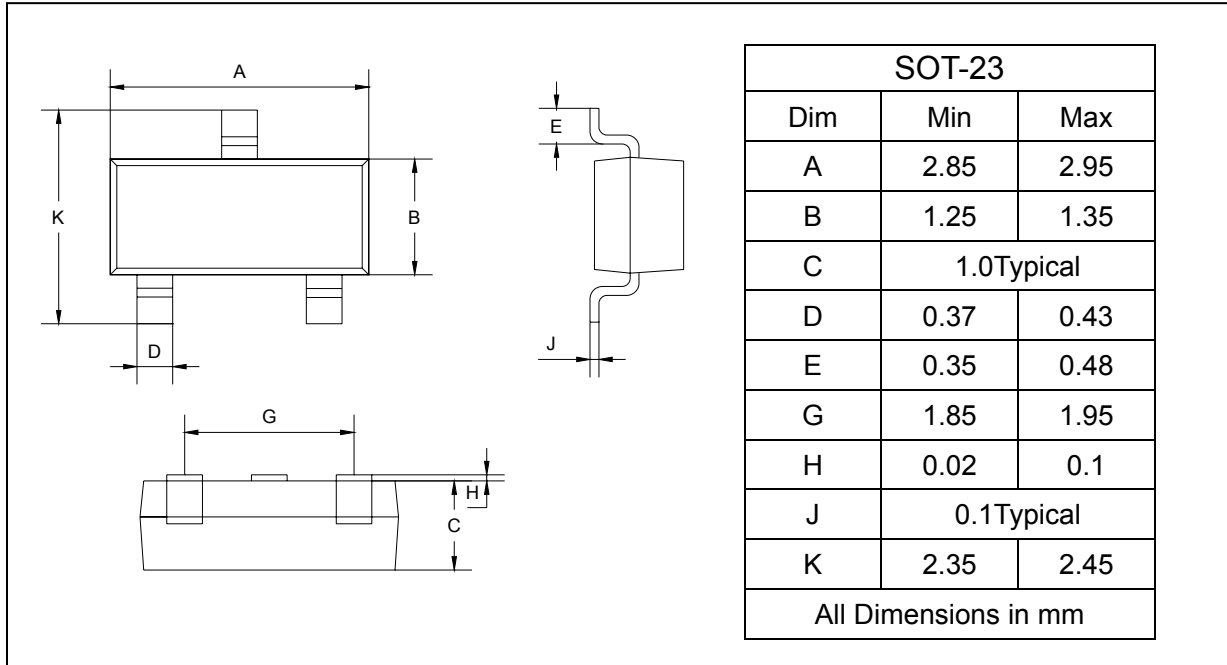
## PNP Silicon Epitaxial Planar Transistor

## FMMT591

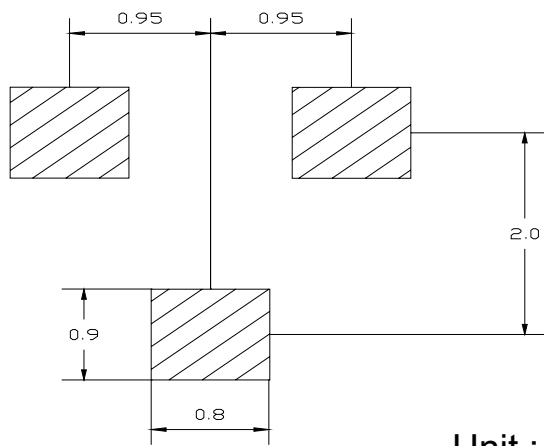
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
FMMT591	SOT-23	3000/Tape&Reel