

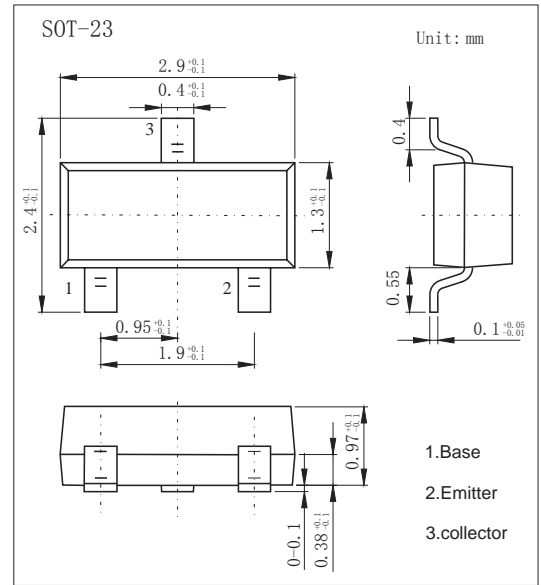
## SOT-23 Plastic-Encapsulate Transistors

### Features

- Collector Current Capability  $I_C=2A$
- Collector Emitter Voltage  $V_{CEO}=50V$
- Complementary to FMMT720
- 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	$V_{CBO}$	50	V
Collector - Emitter Voltage	$V_{CEO}$	50	
Emitter - Base Voltage	$V_{EBO}$	5	
Collector Current - Continuous	$I_C$	2	A
Collector Current - Pulse	$I_{CP}$	6	
Base Current	$I_B$	0.5	
Collector Power Dissipation	$P_C$	625	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
FMMT619	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C=10mA, I_B=0$	50			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E=100\mu A, I_C=0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB}=40V, I_E=0$			100	nA
Collector- emitter cut-off current	$I_{CES}$	$V_{CE}=40V, I_E=0$			100	
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$			20	mV
		$I_C=1A, I_B=10mA$			200	
		$I_C=2A, I_B=50mA$			220	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=2A, I_B=50mA$			1	V
Base-emitter turn-on voltage	$V_{BE(on)}$	$V_{CE}=2V, I_C=2A$			1	
DC current gain	$h_{FE}$	$V_{CE}=2V, I_C=10mA$	200			
		$V_{CE}=2V, I_C=200mA$	300			
		$V_{CE}=2V, I_C=1A$	200			
		$V_{CE}=2V, I_C=2A$	100			
		$V_{CE}=2V, I_C=6A$		40		
Turn-on time	$t_{on}$	$V_{CC}=10V, I_C=1A$		170		ns
Turn-off time	$t_{off}$	$I_{B1}=-I_{B2}=10mA$		750		
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$			20	pF
Transition frequency	$f_T$	$V_{CE}=10V, I_C=50mA, f=100MHz$	100			MHz

### ■ Marking

Marking	619
---------	-----

# RATINGS AND CHARACTERISTIC CURVES

## ■ Typical Characteristics

