

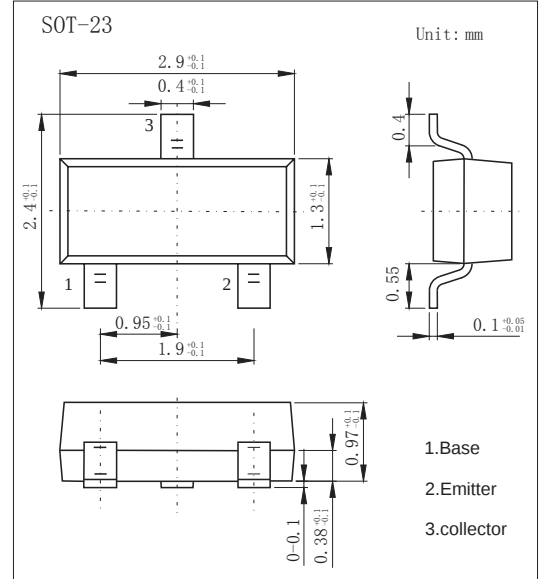
SOT-23 Plastic-Encapsulate Transistors

Features

- Collector Current Capability $I_C=2A$
- Collector Emitter Voltage $V_{CE0}=50V$
- 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}	$I_C = 10 mA, I_B = 0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu A, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 40 V, I_E = 0$			100	nA
Collector- emitter cut-off current	I_{CES}	$V_{CE} = 40 V, I_E = 0$			100	
Emitter cut-off current	I_{EBO}	$V_{EB} = 4 V, I_C = 0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 mA, I_B = 10 mA$			20	mV
		$I_C = 1A, I_B = 10 mA$			200	
		$I_C = 2A, I_B = 50 mA$			220	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 50 mA$			1	V
Base-emitter turn-on voltage	$V_{BE(on)}$	$V_{CE} = 2V, I_C = 2A$			1	
DC current gain	h_{FE}	$V_{CE} = 2V, I_C = 10 mA$	200			
		$V_{CE} = 2V, I_C = 200 mA$	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}	$I_{B1} = -I_{B2} = 10 mA$		750		
Collector output capacitance	C_{ob}	$V_{CB} = 10V, f = 1 MHz$			20	pF
Transition frequency	f_T	$V_{CE} = 10V, I_C = 50 mA, f = 100 MHz$	100			MHz

Marking

Marking	619
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RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics

