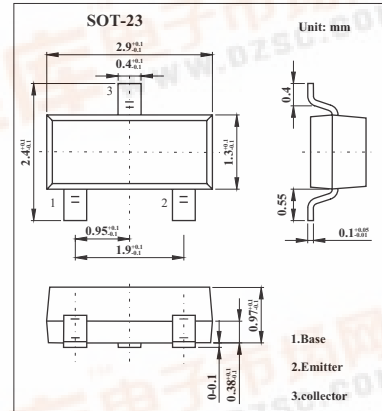


SMD Type Transistors

High Voltage Transistor  
FMMT596

■ Features

- SOT23 PNP silicon planar



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	-220	V
Collector-emitter voltage	V <sub>CE0</sub>	-200	V
Emitter-base voltage	V <sub>EB0</sub>	-5	V
Peak collector current	I <sub>CM</sub>	-1	A
Collector current	I <sub>C</sub>	-0.3	A
Base current	I <sub>B</sub>	-200	mA
Power dissipation	P <sub>tot</sub>	500	mW
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

## FMMT596

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$	-220			V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C = -10mA$	-200			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$	-5			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = -200V$			-100	nA
Collector-Emitter Cut-Off Current	$I_{CES}$	$V_{CE} = -200V$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V$			-100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$			-0.2	V
		$I_C = -250mA, I_B = -25mA$			-0.35	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C = -250mA, I_B = -25mA$			-1.0	V
Base-emitter voltage *	$V_{BE(ON)}$	$I_C = -250mA, V_{CE} = -10V$			-0.9	V
Static Forward Current Transfer Ratio	$h_{FE}$	$I_C = -1mA, V_{CE} = -10V$	100			
		$I_C = -100mA, V_{CE} = -10V^*$	100			
		$I_C = -250mA, V_{CE} = -10V^*$	85		300	
		$I_C = -400mA, V_{CE} = -10V^*$	35			
Current-gain-bandwidth product	$f_T$	$I_C = -50mA, V_{CE} = -10V, f = 100MHz$	150			MHz
Output capacitance	$C_{obo}$	$V_{CB} = -10V, f = 1MHz$			10	pF

\* Pulse test:  $t_p = 300\mu s$ ;  $d \leq 0.02$ .

## ■ Marking

Marking	596
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