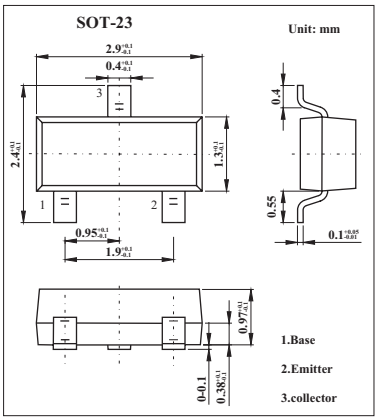
Medium Power Transistor

FMMTL619



■ Features

● Very low equivalent on-resistance;$R_{CE(sat)}$=160mΩ at 1.25A.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	100	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1.25	A
Peak pulse current	I_{CM}	2	A
Base current	I_B	200	mA
Power dissipation	P_{tot}	500	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA	100	210		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=5mA*	50	70		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA	5	8.5		V
Collector-base cut-off current	I_{CBO}	V_{CB}=40V			10	nA
Emitter-base current	I_{EBO}	V_{EB}=4V			10	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA* I_C=250mA, I_B=10mA* I_C=500mA, I_B=25mA* I_C=1.25A, I_B=125mA*		24 60 100 195	45 100 180 330	mV
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=1.25A, I_B=125mA*		1020	1100	mV
Base-emitter ON voltage	$V_{BE(on)}$	I_C=1.25A, V_{CE}=2V*		895	1000	mV
DC current gain	h_{FE}	I_C=10mA, V_{CE}=5V I_C=200mA, V_{CE}=5V* I_C=500mA, V_{CE}=5V* I_C=1A, V_{CE}=5V* I_C=2A, V_{CE}=5V*	200 300 200 100 30	400 450 400 230 50		
Current-gain-bandwidth product	f_T	I_C=50mA, V_{CE}=10V f=100MHz		180		MHz
Output capacitance	C_{obo}	V_{CB}=10V, f=1MHz		6	8	pF
Turn-on time	$t_{(on)}$	I_C=1A, V_{CC}=10V		182		ns
Turn-off time	$t_{(off)}$	I_{B1}=-I_{B2}=10mA		379		ns

* Pulse test: tp ⩽ 300 μs; d ⩽ 0.02.

■ Marking

Marking	L69