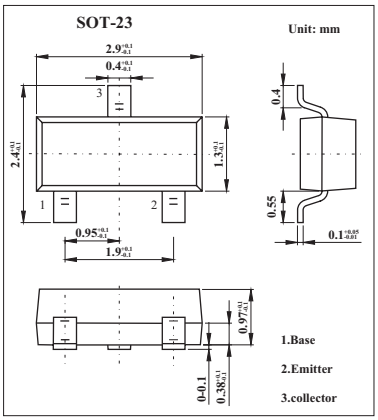
Medium Power Transistor

FMMTL717



■ 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}	-12	V
Collector-emitter voltage	V_{CEO}	-12	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-1.25	A
Peak pulse current	I_{CM}	-4	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	-12	-35		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA*	-12	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA	-5	-8.5		V
Collector-base cut-off current	I_{CBO}	V_{CB}=-10V			-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=-500mA, I_B=-20mA* I_C=-1A, I_B=-50mA* I_C=-1.25A,I_B=-50mA		-24 -94 -160 -200	-40 -140 -240 -290	mV
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-1.25A, I_B=-50mA*		-970	-1100	mV
Base-emitter ON voltage	$V_{BE(on)}$	I_C=-1.25A, V_{CE}=-2V*		-875	-1000	mV
DC current gain	h_{FE}	I_C=-10mA, V_{CE}=-2V I_C=-100mA, V_{CE}=-2V* I_C=-1A, V_{CE}=-2V* I_C=-2A, V_{CE}=-2V* I_C=-3A, V_{CE}=-2V*	300 300 180 100 50	490 450 275 180 110		
Current-gain-bandwidth product	f_T	I_C=-50mA, V_{CE}=-10V f=100MHz		205		MHz
Output capacitance	C_{obo}	V_{CB}=-10V, f=1MHz		15	20	pF
Turn-on time	$t_{(on)}$	I_C=-1A, V_{CC}=-10V		76		ns
Turn-off time	$t_{(off)}$	I_{B1}=I_{B2}=-10mA		149		ns

* Pulse test: tp ⩽ 300 μs; d ⩽ 0.02.

■ Marking

Marking	L77