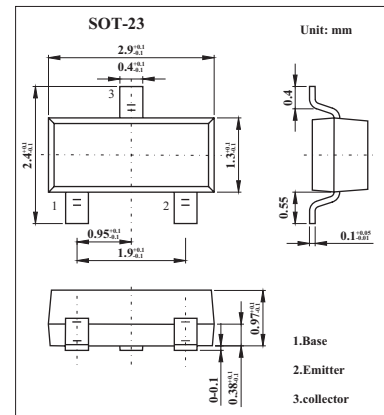


## Medium Power Transistor

## FMMTL717

## ■ Features

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

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

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	$^\circ\text{C}$

## FMRTL718

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$	-12	-35		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA^*$	-12	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$	-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:  $t_p \leq 300 \mu s$ ;  $d \leq 0.02$ .

## ■ Marking

Marking	L77
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