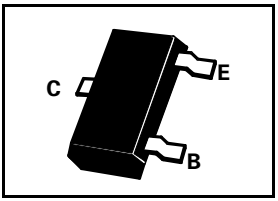
SOT23 PNP SILICON PLANAR HIGH GAIN MEDIUM POWER TRANSISTOR

FMMTL718

ISSUE 1 – DECEMBER 1997

FEATURES

Very low equivalent on-resistance; $\mathbf{R_{CE(sat)}}$=210mΩ at 1.5A



COMPLEMENTARY TYPE – FMMTL618

PARTMARKING DETAIL – L78

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-20	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-1	A
Peak Pulse Current	I_{CM}	-2	A
Base Current	I_B	-200	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	-500	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

FMMTL718

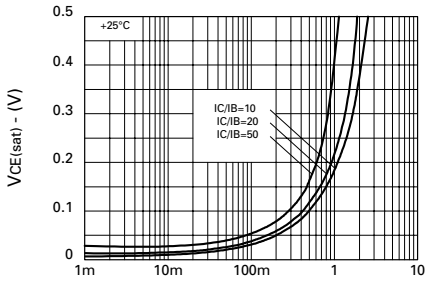
ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-20	-65		V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20	-55		V	I_C=-10mA*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-8.8		V	I_E=-100μA
Collector Cut-Off Current	I_{CBO}			-10	nA	V_{CB}=-15V
Emitter Cut-Off Current	I_{EBO}			-10	nA	V_{EB}=-4V
Collector Cut-Off Current	I_{CES}			-10	nA	V_{CE}=-15V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-33 -130 -230 -315	-50 -180 -320 -450	mV mV mV mV	I_C=-100mA, I_B=-10mA* I_C=-500mA, I_B=-20mA* I_C=-1A, I_B=-50mA* I_C=-1.5A,I_B=-100mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-950	-1100	mV	I_C=-1.25A, I_B=-100mA*
Base-Emitter Turn On Voltage	$V_{BE(on)}$		-850	-1000	mV	I_C=-1.25A, V_{CE}=-2V*
Static Forward Current Transfer Ratio	h_{FE}	300 300 200 120 50	500 450 320 200 80			I_C=-10mA, V_{CE}=-2V I_C=-100mA, V_{CE}=-2V* I_C=-0.5A, V_{CE}=-2V* I_C=-1A, V_{CE}=-2V* I_C=-1.5A, V_{CE}=-2V*
Transition Frequency	f_T		265		MHz	I_C=-50mA, V_{CE}=-10V f=100MHz
Collector-Base Breakdown Voltage	C_{obo}		9	12	pF	V_{CB}=-10V, f=1MHz
Switching times	t_{on} t_{off}		108 121		ns ns	I_C=-1A, V_{CC}=-10V I_{B1}=I_{B2}=-10mA

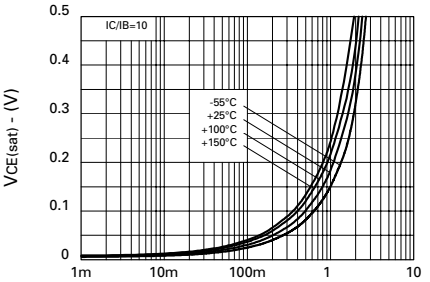
*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%

FMMTL718

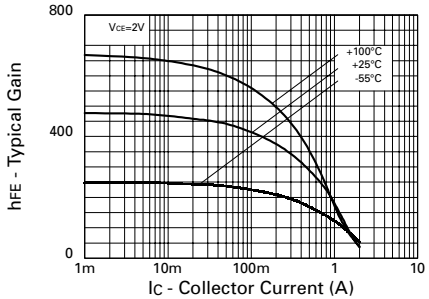
TYPICAL CHARACTERISTICS



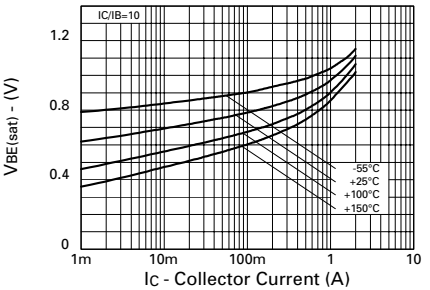
VCE(sat) v IC



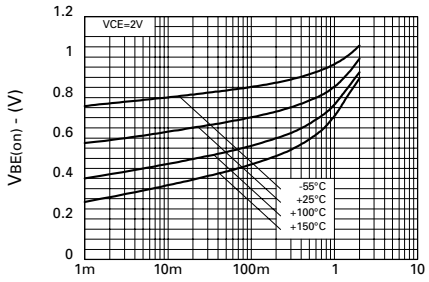
VCE(sat) v IC



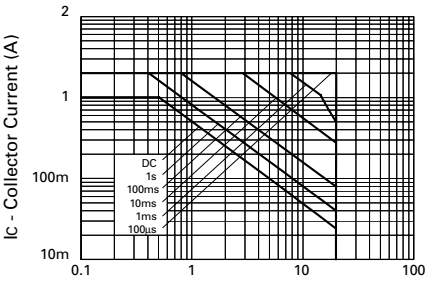
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.