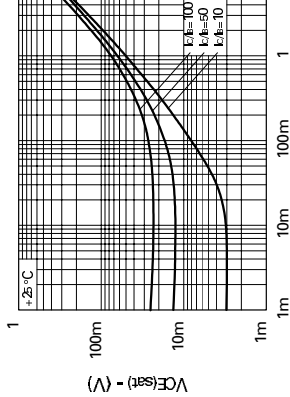


FMMT618 **FMMT619**

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

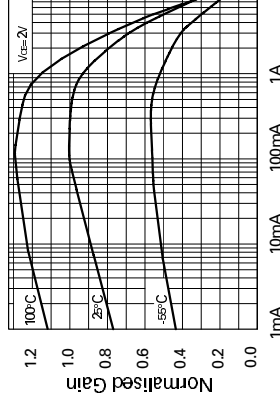
PARAMETER	SYMBOL	FMMT618			FMMT619			UNIT	CONDITIONS.
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
Collector-Base Breakdown Voltage	V _{BR} CEO	20	100		50	190		V	I _C =100µA
Collector-Emitter Breakdown Voltage	V _{BR} CEO	20	27		50	65		V	I _C =10mA*
Emitter-Base Breakdown Voltage	V _{BR} EB0	5	8.3		5	8.3		V	I _E =100µA
Collector Cut-Off Current	I _{CBO}			100				nA nA	V _{CB} =16V V _{CB} =40V
Emitter Cut-Off Current	I _{EBO}			100				nA	V _{EB} =4V
Collector Emitter Cut-Off Current	I _{CES}			100				nA nA	V _{CE} S=16V V _{CE} S=40V
Collector-Emitter Saturation Voltage	V _{CE} (sat)		8 70 130	15 150 200		10 125 150	20 200 220	mV mV mV	I _C =0.1A, I _B =10mA* I _C =1A, I _B =10mA* I _C =2A, I _B =50mA* I _C =2.5A, I _B =50mA*
							1.0	V	I _C =2A, I _B =50mA*
			0.89	1.0				V	I _C =2.5A, I _B =50mA*
Base-Emitter Saturation Voltage	V _{BE} (sat)					0.87		V	I _C =2A, V _{CE} =2V*
Base-Emitter Turn-On Voltage	V _{BE} (on)			1.0		0.80	1.0	V	I _C =2.5A, V _{CE} =2V*
Static Forward Current Transfer Ratio	h _{FE}	200 300 200	400 450 360		200 300 100	400 450 225			I _C =10mA, V _{CE} =2V* I _C =200mA, V _{CE} =2V* I _C =1A, V _{CE} =2V* I _C =2A, V _{CE} =2V*
		100	180			40			I _C =6A, V _{CE} =2V*
Transition Frequency	f _T	100	140		100	165		MHz	I _C =50mA, V _{CE} =10V f=100MHz
Output Capacitance	C _{obo}		23	30		12	20	pF	V _{CB} =10V, f=1MHz

TYPICAL CHARACTERISTICS



IC - Collector Current (A)

VCE(SAT) v IC



Collector Current

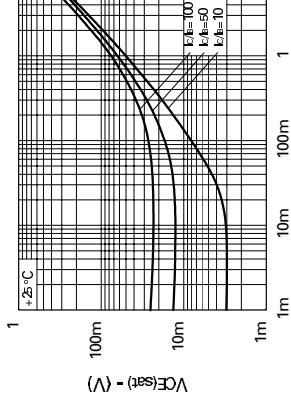
hFE vs IC

FMMT618 **FMMT619**

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

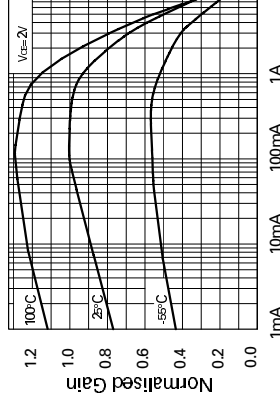
PARAMETER	SYMBOL	FMMT618			FMMT619			CONDITIONS.
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
Collector-Base Breakdown Voltage	V _{BR} CEO	20	100		50	190		V I _C = 100µA
Collector-Emitter Breakdown Voltage	V _{BR} CEO	20	27		50	65		V I _C = 10mA*
Emitter-Base Breakdown Voltage	V _{BR} EB0	5	8.3		5	8.3		V I _E = 100µA
Collector Cut-Off Current	I _{CBO}			100				nA V _{CB} = 16V V _{CB} = 40V
Emitter Cut-Off Current	I _{EB0}			100				nA V _{EB} = 4V
Collector Emitter Cut-Off Current	I _{CES}			100				nA V _{CES} = 16V V _{CES} = 40V
Collector-Emitter Saturation Voltage	V _{CE} (sat)		8	15		10		mV I _C = 0.1A, I _B = 10mA*
			70	150		125		mV I _C = 1A, I _B = 10mA*
			130	200		150		mV I _C = 2A, I _B = 50mA*
Base-Emitter Saturation Voltage	V _{BE} (sat)					0.87	1.0	mV I _C = 2.5A, I _B = 50mA*
			0.89	1.0				V I _C = 2A, I _B = 50mA*
Base-Emitter Turn-On Voltage	V _{BE} (on)					0.80	1.0	V I _C = 2.5A, V _{CE} = 2V*
			0.79	1.0				V I _C = 2A, V _{CE} = 2V*
Static Forward Current Transfer Ratio	h _{FE}	200	400		200	400		I _C = 10mA, V _{CE} = 2V*
		300	450		300	450		I _C = 200mA, V _{CE} = 2V*
		200	360		200	400		I _C = 1A, V _{CE} = 2V*
		100	180		100	225		I _C = 2A, V _{CE} = 2V*
Transition Frequency	f _T	100	140		100	165		MHz I _C = 50mA, V _{CE} = 10V f= 100MHz
Output Capacitance	C _{obo}		23	30		12	20	pF V _{CB} = 10V, f= 1MHz

TYPICAL CHARACTERISTICS



IC - Collector Current (A)

VCE(SAT) v IC



Collector Current

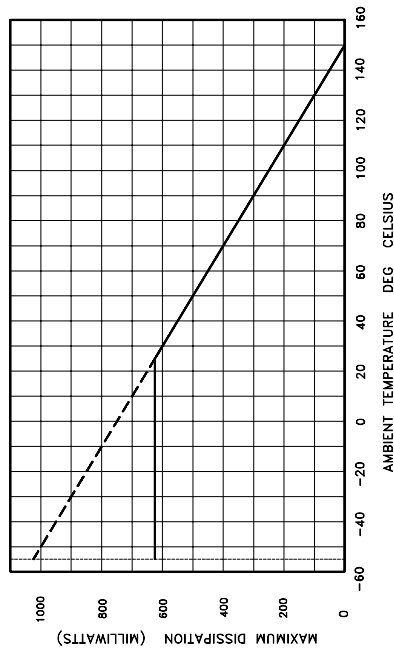
hFE vs IC

FMMT617 FMMT624
FMMT618 FMMT625
FMMT619

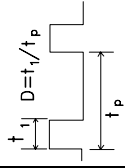
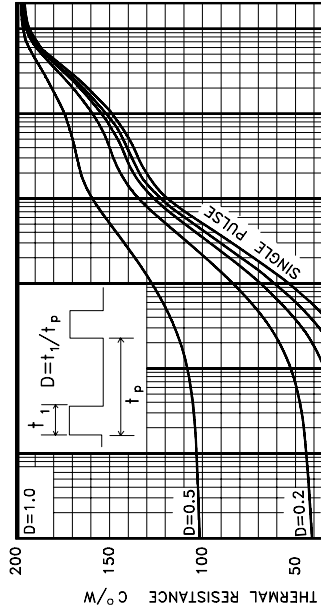
SuperSOT Series

FMMT717 FMMT722
FMMT718 FMMT723
FMMT720

THERMAL CHARACTERISTICS AND DERATING INFORMATION



DERATING CURVE



SINGLE PULSE