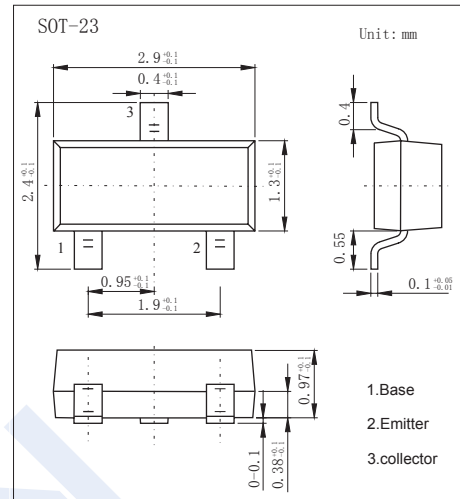


NPN Transistors

FMMT619

■ Features

- Collector Current Capability $I_c=2A$
- Collector Emitter Voltage $V_{CE0}=50V$
- Complementary to FMMT720

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	50	V
Collector - Emitter Voltage	V_{CEO}	50	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_c	2	A
Collector Current - Pulse	I_{CP}	6	
Base Current	I_B	0.5	
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to 150	

NPN Transistors

FM6T619

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CBO}	I _C = 100 μA, I _E = 0	50			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 10 mA, I _B = 0	50			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100 μA, I _C = 0	5			
Collector-base cut-off current	I _{CBO}	V _{CB} = 40 V, I _E = 0			100	nA
Collector- emitter cut-off current	I _{CE0}	V _{CE} = 40 V, I _E = 0			100	
Emitter cut-off current	I _{EBO}	V _{EB} = 4V, I _C =0			100	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100 mA, I _B =10mA			20	mV
		I _C =1A, I _B =10mA			200	
		I _C =2A, I _B =50mA			220	
Base - emitter saturation voltage	V _{BE(sat)}	I _C =2A, I _B =50mA			1	V
Base-emitter turn-on voltage	V _{BE(on)}	V _{CE} = 2V, I _C = 2A			1	
DC current gain	h _{FE}	V _{CE} = 2V, I _C = 10mA	200			
		V _{CE} = 2V, I _C = 200mA	300			
		V _{CE} = 2V, I _C = 1A	200			
		V _{CE} = 2V, I _C = 2A	100			
		V _{CE} = 2V, I _C = 6A		40		
Turn-on time	t _{on}	V _{CC} =10V, I _C =1A		170		ns
Turn-off time	t _{off}	I _{B1} =-I _{B2} =10mA		750		
Collector output capacitance	C _{ob}	V _{CB} = 10V, f=1MHz			20	pF
Transition frequency	f _t	V _{CE} = 10V, I _C = 50mA, f=100MHz	100			MHz

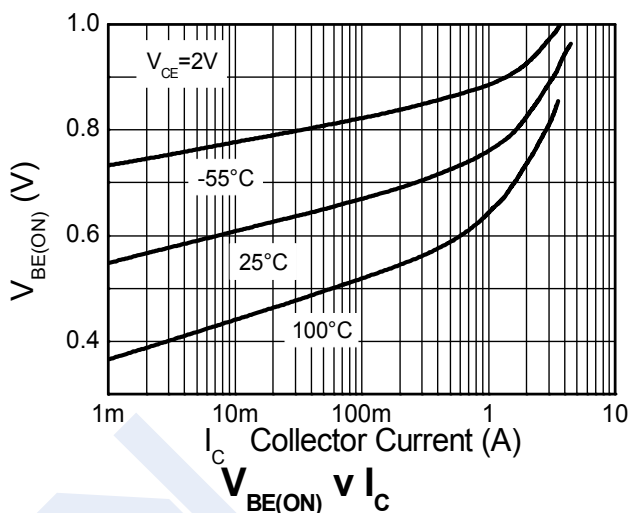
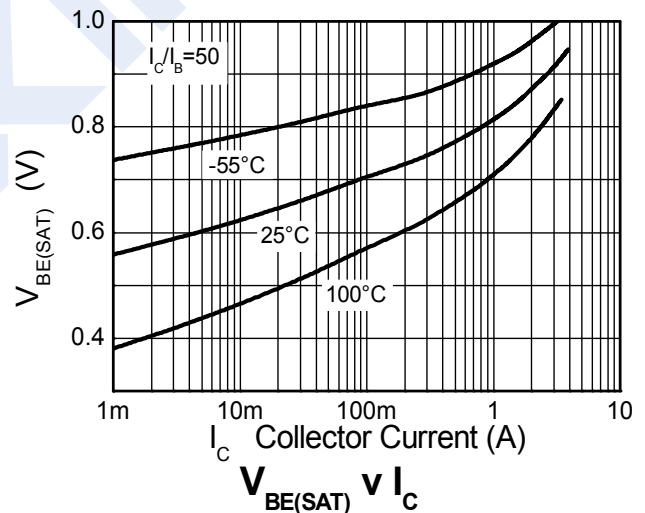
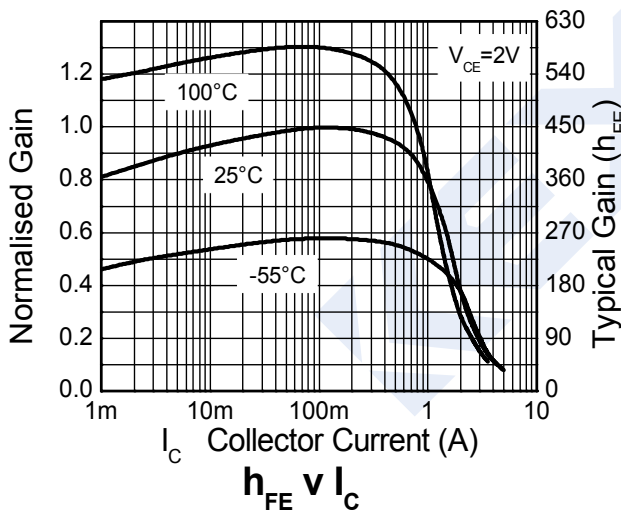
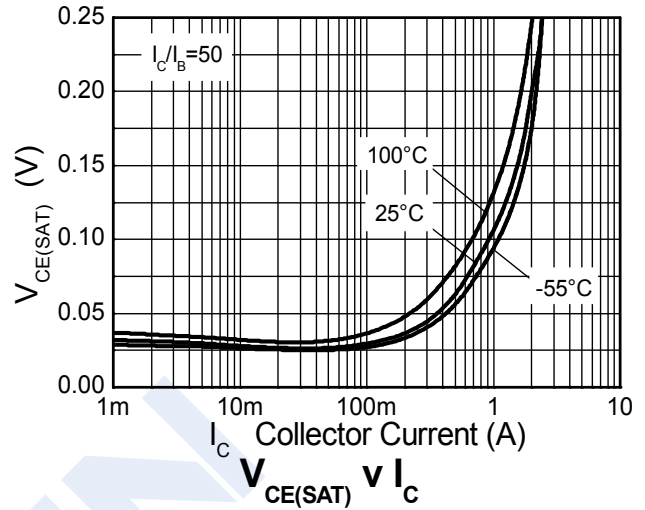
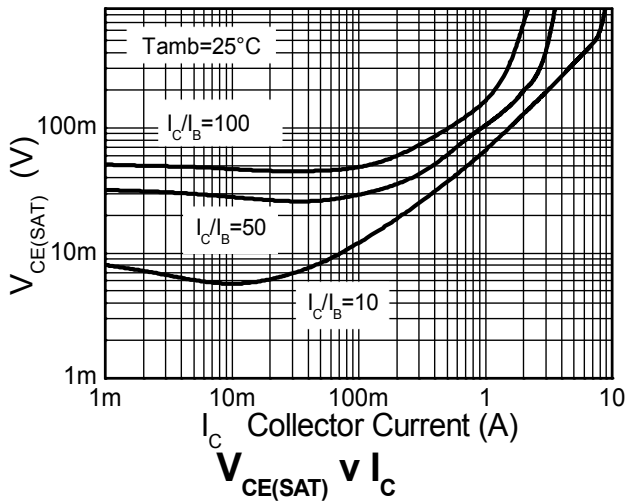
■ Marking

Marking	619
---------	-----

NPN Transistors

FM6T619

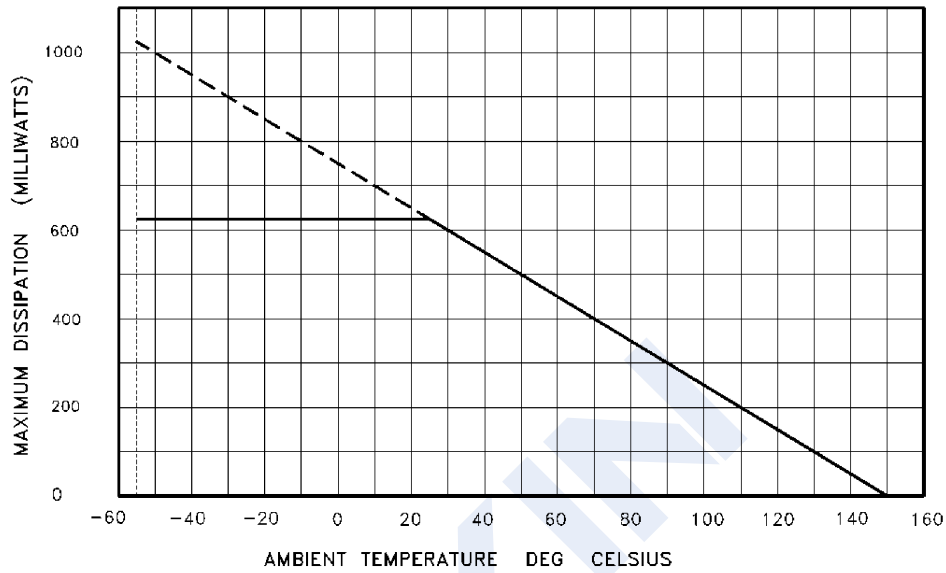
■ Typical Characteristics



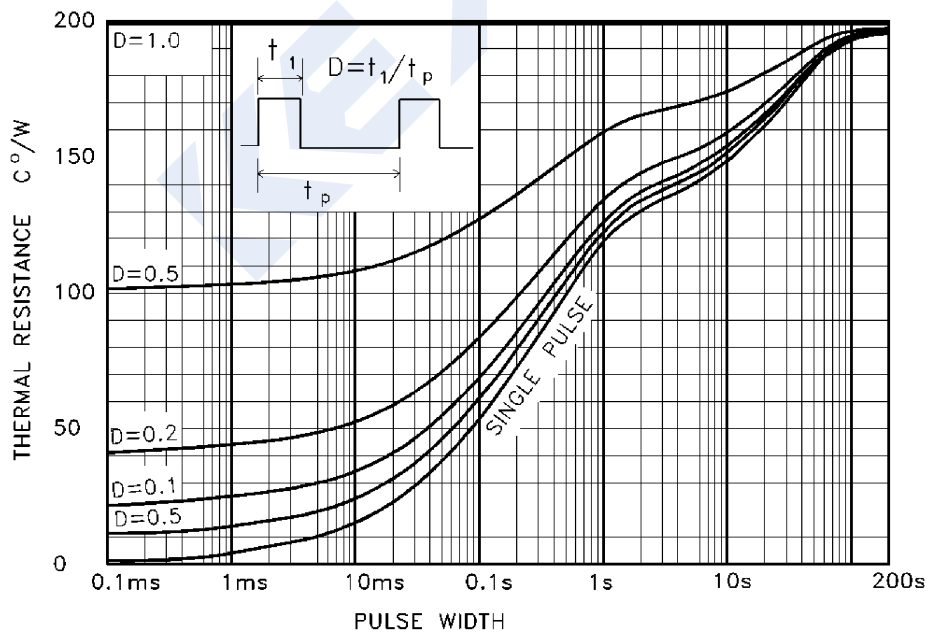
NPN Transistors

FM6T619

■ Typical Characteristics



DERATING CURVE



MAXIMUM TRANSIENT THERMAL RESISTANCE