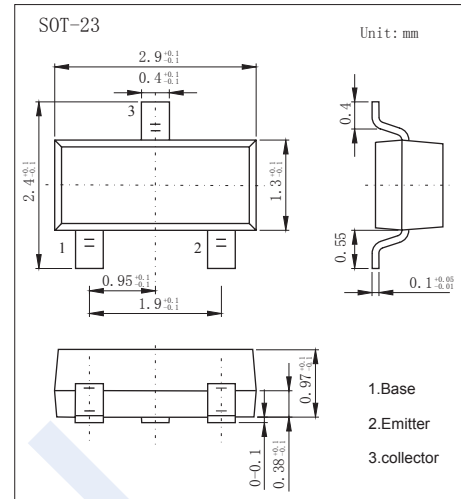


NPN Transistors

FMMT624 (KMMT624)

■ Features

- Collector Current Capability $I_c=1A$
- Collector Emitter Voltage $V_{CE0}=125V$
- Complementary to FMMT723



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	125	V
Collector - Emitter Voltage	V_{CE0}	125	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_c	1	A
Collector Current - Pulse	I_{cP}	3	
Base Current	I_B	0.5	
Collector Power Dissipation	P_c	625	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 to 150	

NPN Transistors

FMMT624 (KMMT624)

■ Electrical Characteristics Ta = 25°C

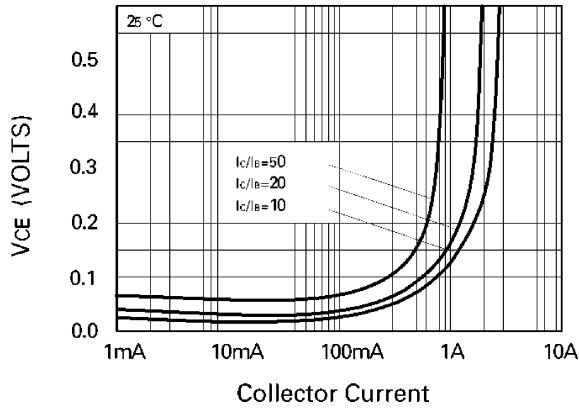
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E = 0	125			V
Collector- emitter breakdown voltage	V _{CE0}	I _c = 10 mA, I _B = 0	125			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _C = 0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 100 V, I _E = 0			100	nA
Collector- emitter cut-off current	I _{CES}	V _{CE} = 100 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			50	mV
		I _c =500 mA, I _B =50mA			150	
		I _c =500 mA, I _B =10mA			220	
		I _c =1A, I _B =50mA			250	
Base - emitter saturation voltage	V _{BE(sat)}	I _c =1A, I _B =50mA			1	V
Base-emitter turn-on voltage	V _{BE(on)}	V _{CE} = 10V, I _C = 1A			1	
DC current gain	h _{FE}	V _{CE} = 10V, I _C = 10mA	200			
		V _{CE} = 10V, I _C = 200mA	300			
		V _{CE} = 10V, I _C = 1A	100			
		V _{CE} = 10V, I _C = 3A		18		
Turn-on time	t _{on}	V _{CC} =50V, I _C =0.5A		60		ns
Turn-off time	t _{off}	I _{B1} =-I _{B2} =50mA		1300		
Collector output capacitance	C _{ob}	V _{CB} = 10V, f=1MHz			15	pF
Transition frequency	f _T	V _{CE} = 10V, I _C = 50mA, f=100MHz	100			MHz

■ Marking

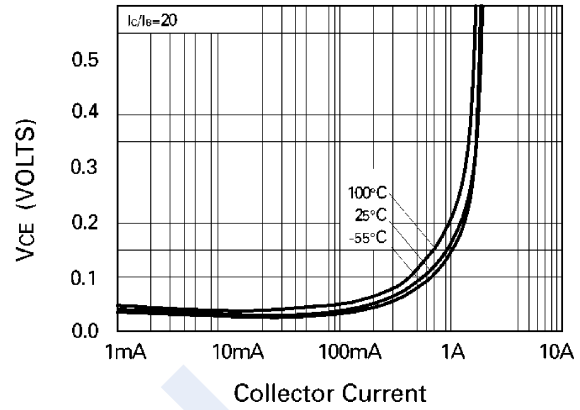
Marking	624
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NPN Transistors FM624 (KMMT624)

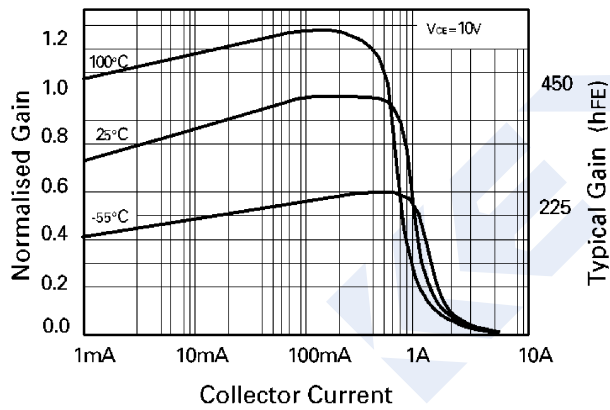
■ Typical Characteristics



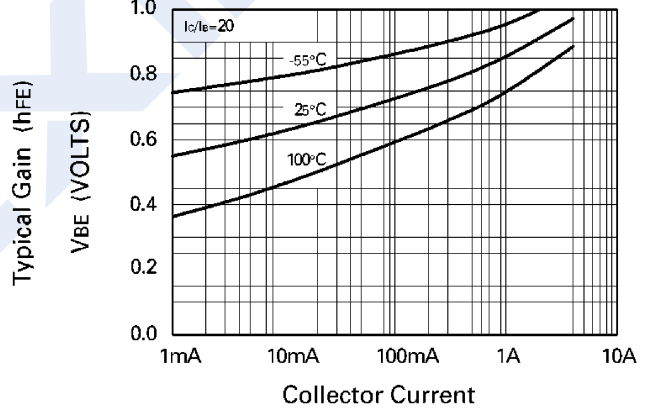
VCE(SAT) vs IC



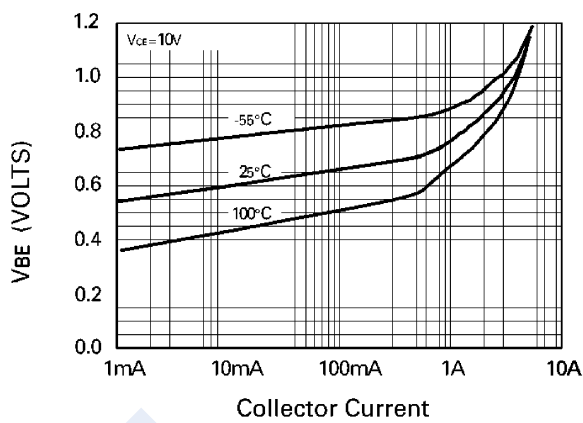
VCE(SAT) vs IC



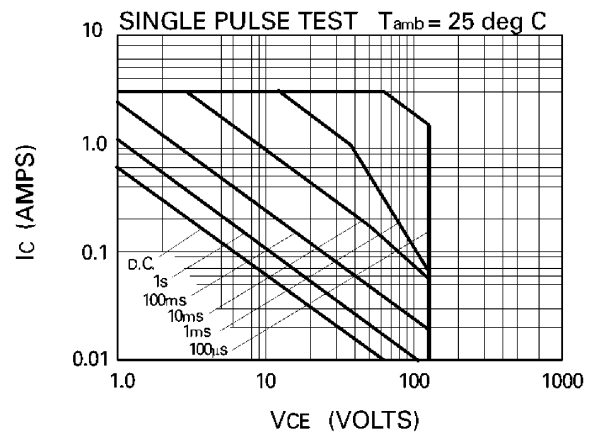
hFE vs IC



VBE(SAT) vs IC



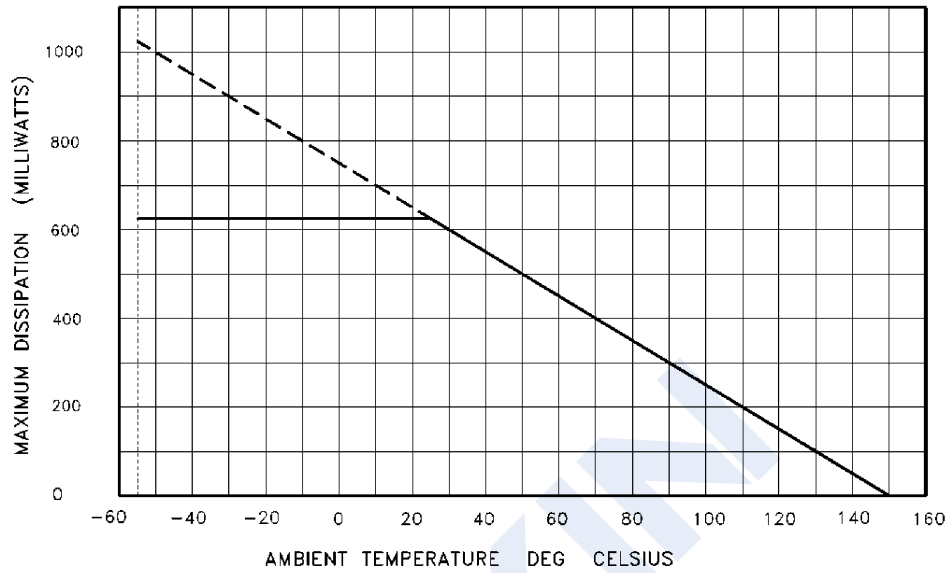
VBE(ON) vs IC



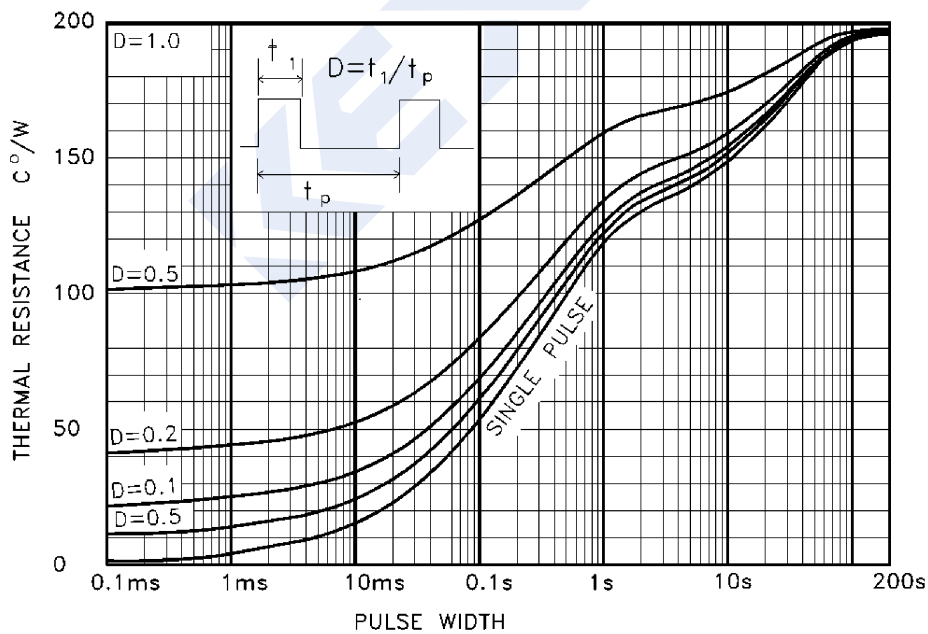
Safe Operating Area

NPN Transistors FMMT624 (KMMT624)

■ Typical Characteristics



DERATING CURVE



MAXIMUM TRANSIENT THERMAL RESISTANCE