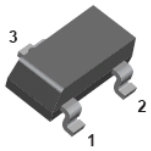
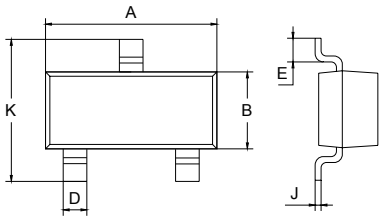
FMMT491

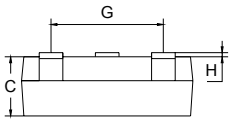
SOT-23 Bipolar Transistor(NPN)

FEATURES

- Low saturation.
- Complementary To FMMT591.
- Excellent H_{FE} Linearity.







SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

APPLICATIONS

- Switching appilication.

ORDERING INFORMATION

Type No.	Marking	Package Code
FMMT491	491	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1	A
P_C	Collector Dissipation	500	mW
T_j, T_{stg}	Operating and Storage Temperature Range	-55 to +150	℃

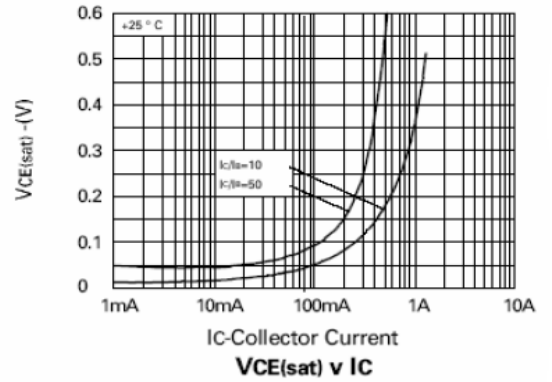
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=5V,I_C=1mA	100			
		V_{CE}=5V,I_C=500mA	100		300	
		V_{CE}=5V,I_C=1A	80			
		V_{CE}=5V,I_C=2A	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B= 50mA I_C=1A, I_B= 100mA			0.25 0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=1A, I_B= 100mA			1.1	V
Base-emitter voltage	$V_{BE(on)}$	I_C=1A,V_{CE}=5V			1.0	V
Transition frequency	f_T	V_{CE}=10V, I_C= 50mA f=100MHz	150			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,f=1MHz			10	pF

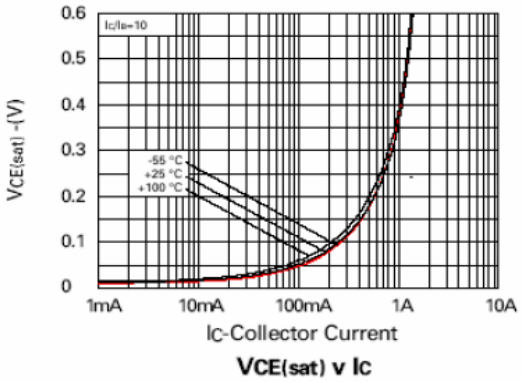
FMMT491

SOT-23 Bipolar Transistor(NPN)

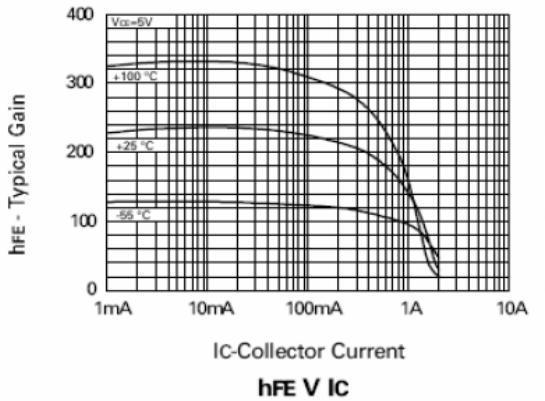
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



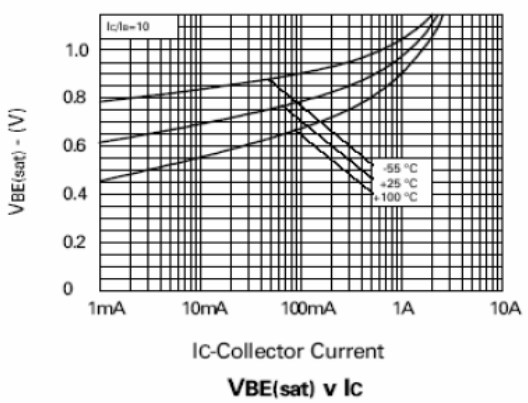
VCE(sat) v IC



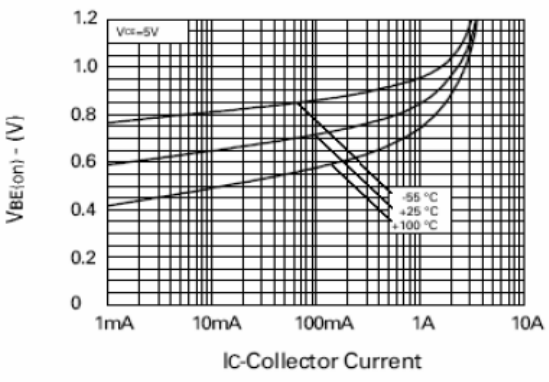
VCE(sat) v IC

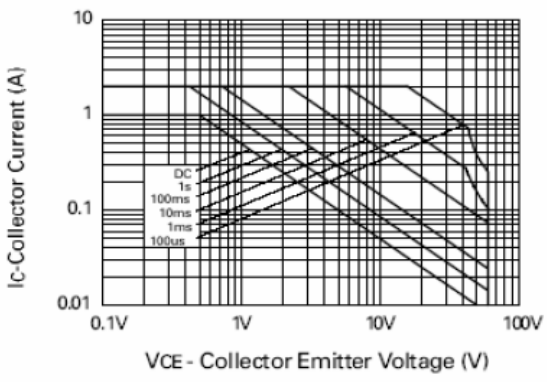


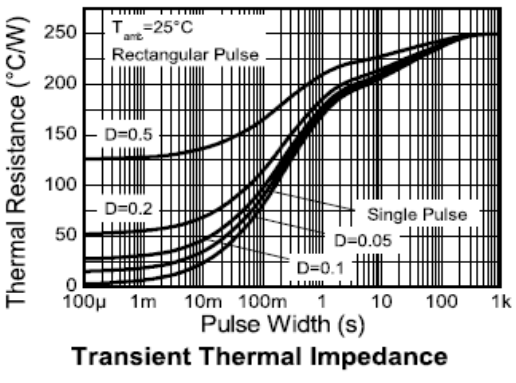
hFE V IC



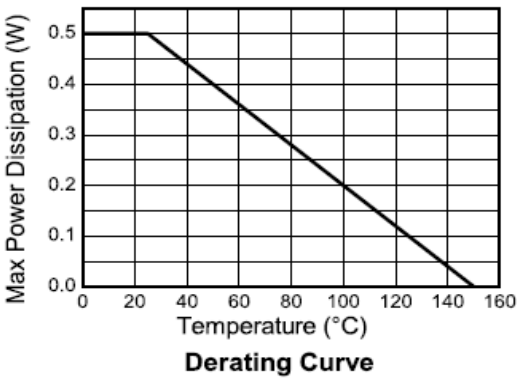
VBE(sat) v Ic







Transient Thermal Impedance



Derating Curve

Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220