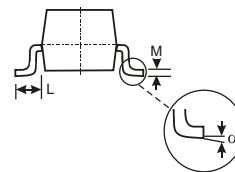
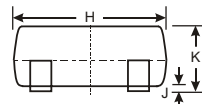
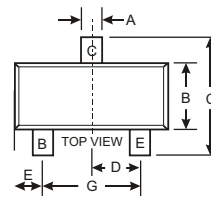


Features

- $BV_{CEO} > -100V$.
- $I_C = -1A$ High Continuous Collector Current.
- Low Saturation Voltage.
- NPN complement: FMMT493
- Marking Code: 493



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
α	0°	8°
All Dimensions in mm		

Maximum Ratings @ $T_A = 25^\circ C$ unless otherwise specified

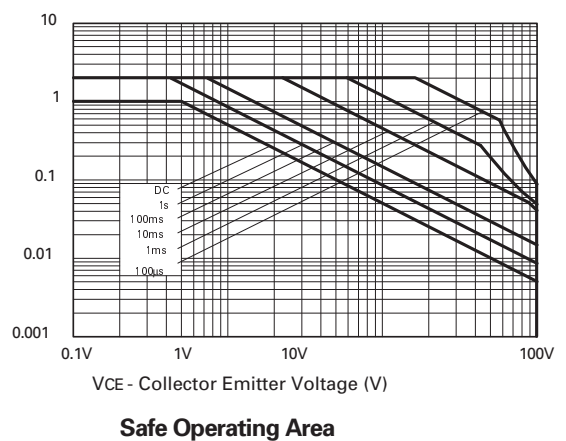
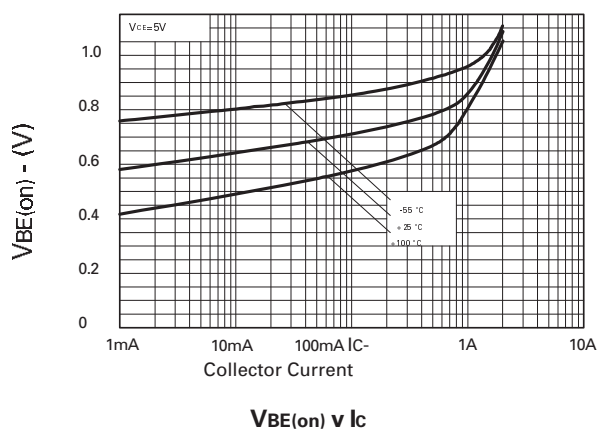
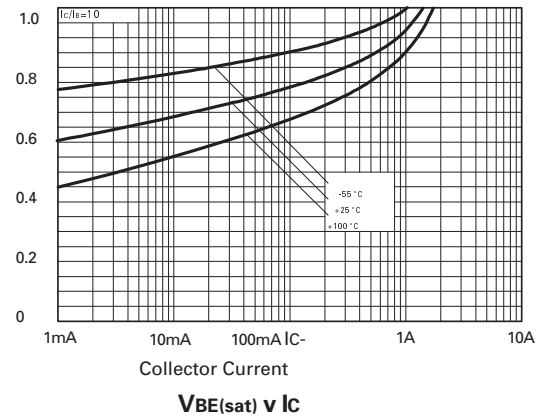
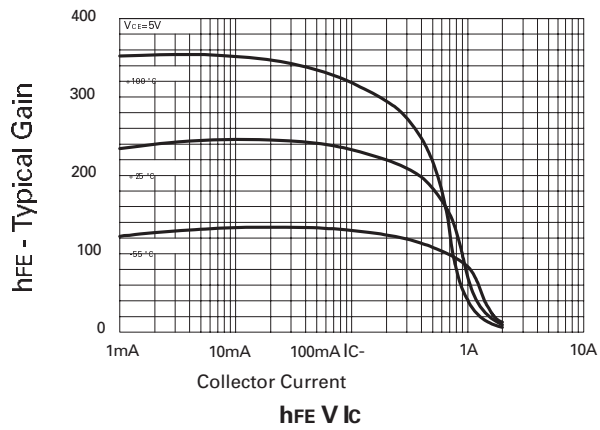
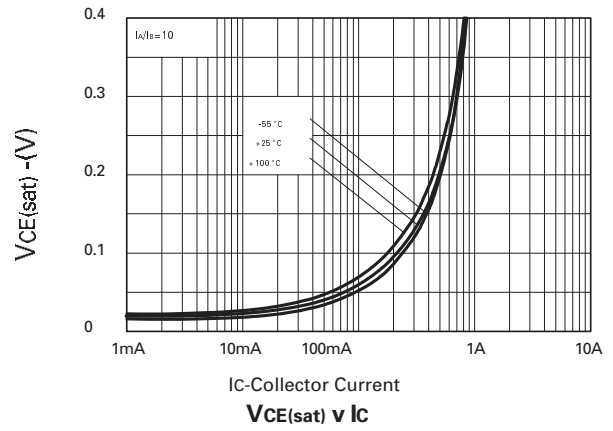
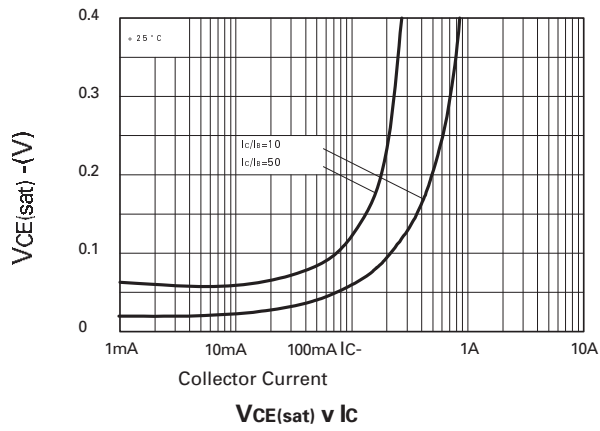
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	250	mW
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55 ~ +150	$^\circ C$

Electrical Characteristics @ $T_A = 25^\circ C$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CES}	$V_{CES} = -100V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}^*$	$V_{CE} = -5V, I_C = -1mA$	100			
	$h_{FE(2)}^*$	$V_{CE} = -5V, I_C = -250mA$	100			
	$h_{FE(3)}^*$	$V_{CE} = -5V, I_C = -0.5A$	100		300	
	$h_{FE(4)}^*$	$V_{CE} = -5V, I_C = -1A$	50			
Collector-emitter saturation voltage	$V_{CE(sat)1}^*$	$I_C = -250mA, I_B = -25mA$			-0.2	V
	$V_{CE(sat)2}^*$	$I_C = -500mA, I_B = -50mA$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C = -500mA, I_B = -50mA$			-1.1	V
Base-emitter voltage	V_{BE}^*	$V_{CE} = -5V, I_C = -1mA$			-1	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -50mA, f = 100MHz$	50			MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		5		pF

*Pulse test: pulse width $\leq 300\mu s$, duty cycle $\leq 2.0\%$.

TYPICAL TRANSIENT CHARACTERISTICS



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