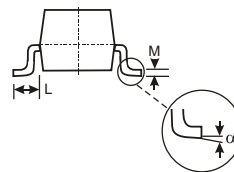
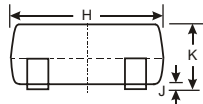
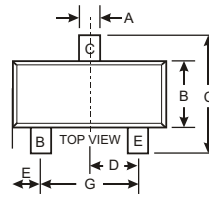


Features

- $I_{CM}=2A$ Peak Pulse Current.
- $R_{CE(sat)}=195m\Omega$ for a low equivalent On-Resistance.
- 500mW Power Dissipation.
- PNP complement:FMMT591
- Marking Code:491



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

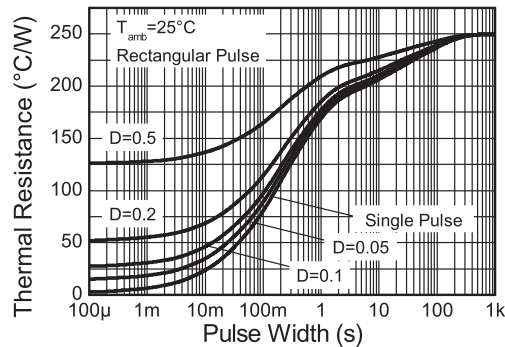
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
I_{CM}	Peak Pulse Current	2	A
P_C	Collector Power Dissipation	500	mW
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~+150	$^\circ C$

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

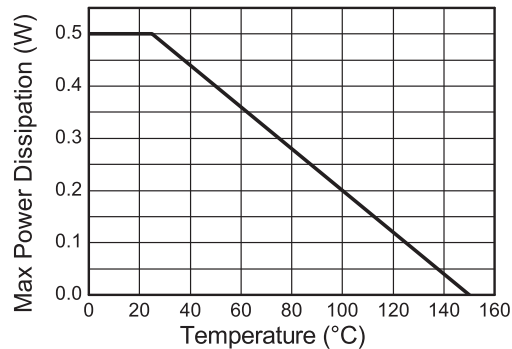
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^1$	$I_C=10mA, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5.6V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=1mA$	100			
	$h_{FE(2)}^1$	$V_{CE}=5V, I_C=-500mA$	100		300	
	$h_{FE(3)}^1$	$V_{CE}=5V, I_C=-1A$	80			
	$h_{FE(4)}^1$	$V_{CE}=5V, I_C=-2A$	30			
Collector-emitter saturation voltage	$V_{CE(sat)1}^1$	$I_C=500mA, I_B=-50mA$			0.25	V
	$V_{CE(sat)2}^1$	$I_C=1A, I_B=100mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^1$	$I_C=1A, I_B=100mA$			1.1	V
Transition frequency	f_T	$V_{CE}=10V, I_C=50mA, f=100MHz$	150			MHz

¹Measured under pulsed conditions, Pulse width=300 μs , Duty cycle $\leq 2\%$.

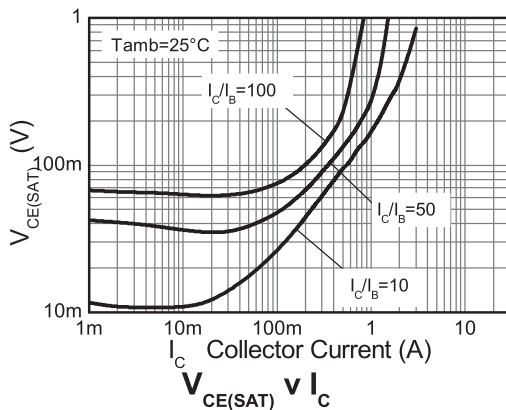
TYPICAL TRANSIENT CHARACTERISTICS



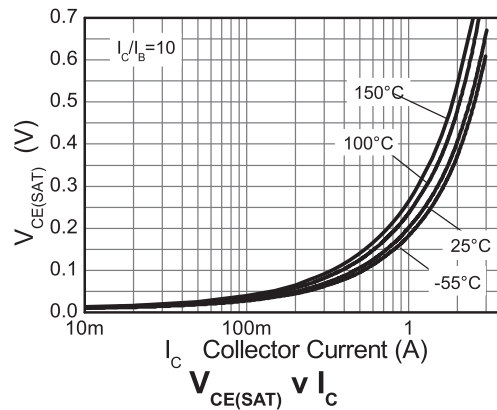
Transient Thermal Impedance



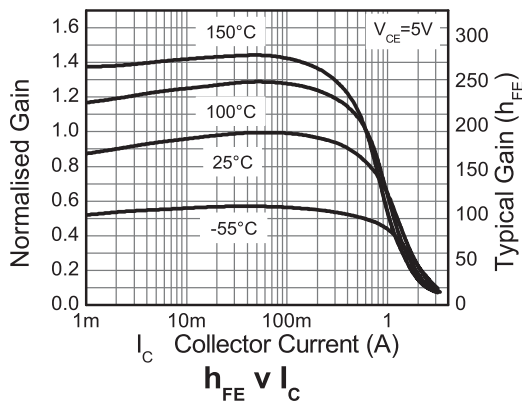
Derating Curve



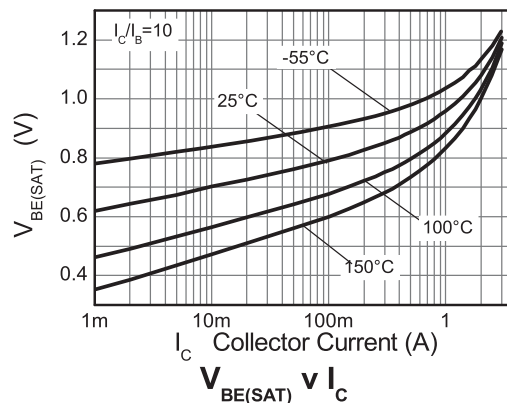
$V_{\text{CE(SAT)}}$ v I_C



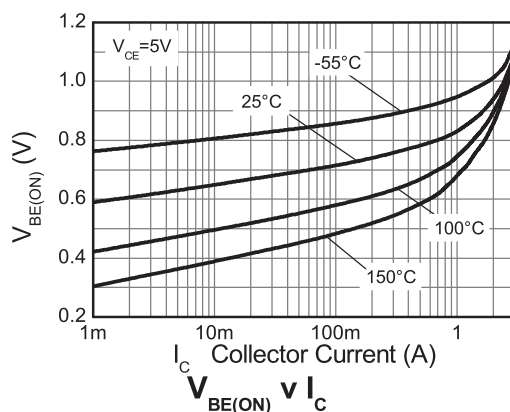
$V_{\text{CE(SAT)}}$ v I_C



h_{FE} v I_C



$V_{\text{BE(SAT)}}$ v I_C



$V_{\text{BE(ON)}}$ v I_C

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