



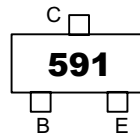
FMMT591

PNP Plastic-Encapsulate Transistor

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Power dissipation: $P_{CM}=0.5W(T_{amb}=25^{\circ}C)$
- Collector current: $I_C=-1A$
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Pin Configuration
Top View



Maximum Ratings*

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{CBO}	Collector-Base Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current,	-1.0	
P_{tot}	Power Dissipation at $T_{amb}=25^{\circ}C$	500	mW
T_J	Operating Junction Temperature	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$

Electrical Characteristics @ 25°C Unless Otherwise Specified

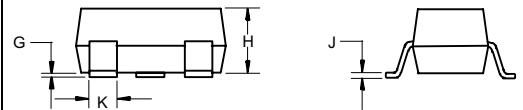
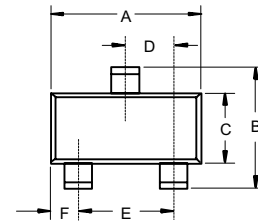
Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=-10mAdc, I_B=0$)	-60	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-100\mu Adc, I_E=0$)	-80	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-100\mu Adc, I_C=0$)	-5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=-60Vdc, I_E=0Vdc$)	---	-0.1	μAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-4.0Vdc, I_C=0$)	---	-0.1	μAdc
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage* ($I_C=-500mAdc, I_B=-50mAdc$) ($I_C=-1Adc, I_B=-100mAdc$)	---	-0.3 -0.6	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage* ($I_C=-1Adc, I_B=-100mAdc$)	---	-1.2	Vdc
V_{BE}	Base-Emitter Voltage* ($V_{CE}=-5Vdc, I_C=-1Adc$)	---	-1	Vdc
h_{FE}	DC Current Gain ($V_{CE}=-5Vdc, I_C=-1mAdc$) ($V_{CE}=-5Vdc, I_C=-500mAdc$)* ($V_{CE}=-5Vdc, I_C=-1Adc$)* ($V_{CE}=-5Vdc, I_C=-2Adc$)*	100	---	
f_T	Transition Frequency ($I_C=-50mAdc, V_{CE}=-10Vdc, f=100MHz$)	150	---	MHz
C_{ob}	Output Capacitance ($V_{CB}=-10Vdc, f=1.0MHz$)	---	10	pF

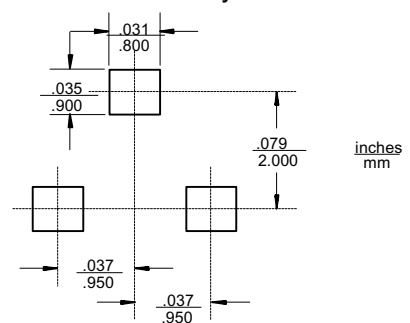
* Measured under pulsed conditions. Pulse width=300us. Duty cycle $\leq 2\%$

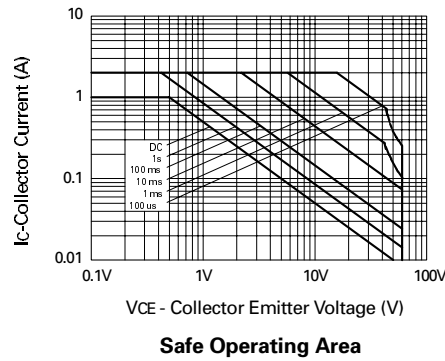
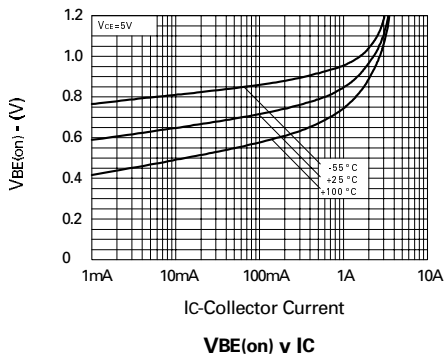
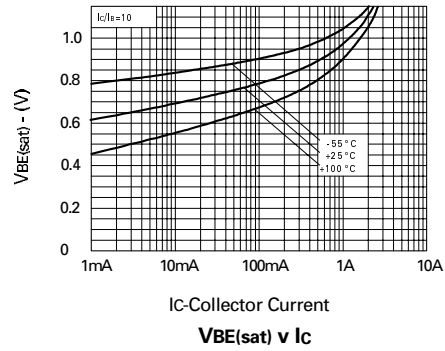
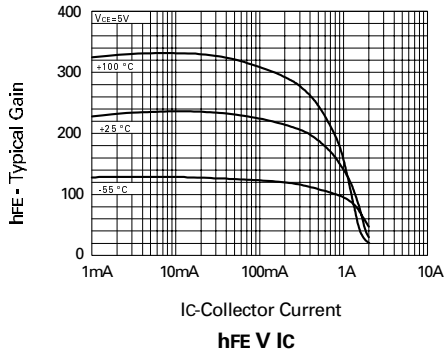
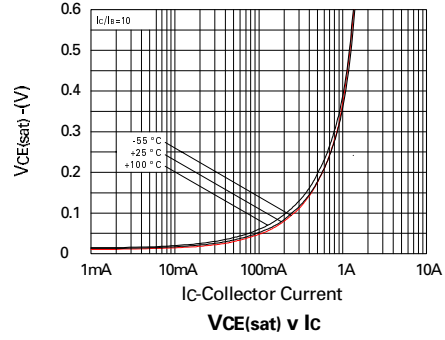
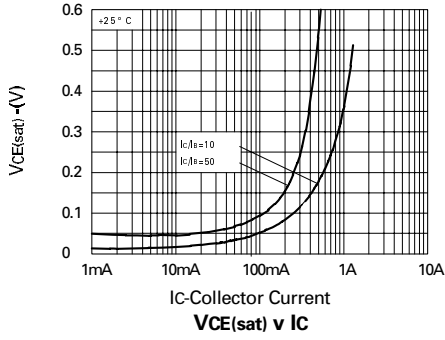
SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout





Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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