

SOT23 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FMMT591

ISSUE 3 - OCTOBER 1995

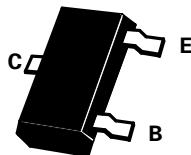


FEATURES

- * Low Equivalent on resistance $R_{CE(sat)}=355m\Omega$ at 1A*

COMPLEMENTARY TYPE- FMMT491

PARTMARKING DETAIL - 591



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-2	A
Continuous Collector Current	I_C	-1	A
Base Current	I_B	-200	mA
Power Dissipation at $T_{amb}=25^\circ C$	P_{tot}	500	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ C$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ C$).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80		V	$I_C=-100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-60		V	$I_C=-10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E=-100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB}=-60V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB}=-4V, I_C=0$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES}=-60V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.3 -0.6	V	$I_C=-500mA, I_B=-50mA^*$ $I_C=-1A, I_B=-100mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.2	V	$I_C=-1A, I_B=-100mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C=-1A, V_{CE}=-5V^*$
Static Forward Current Transfer Ratio	h_{FE}	100 100 80 15	300		$I_C=-1mA, V_{CE}=-5V^*$ $I_C=-500mA, V_{CE}=-5V^*$ $I_C=-1A, V_{CE}=-5V^*$ $I_C=-2A, V_{CE}=-5V^*$
Transition Frequency	f_T	150		MHz	$I_C=-50mA, V_{CE}=-10V$ $f=100MHz$
Output Capacitance	C_{obo}		10	pF	$V_{CB}=-10V, f=1MHz$

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

FMMT591

TYPICAL CHARACTERISTICS

