

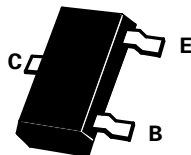
# SOT23 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 - NOVEMBER 1995



## FMMT596

PARTMARKING DETAIL – 596



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-220	V
Collector-Emitter Voltage	$V_{CEO}$	-200	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Peak Pulse Current	$I_{CM}$	-1	A
Continuous Collector Current	$I_C$	-0.3	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	$V_{(BR)CBO}$	-220		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-200		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	$I_{CBO}$		-100	nA	$V_{CB} = -200V$
Emitter Cut-Off Current	$I_{EBO}$		-100	nA	$V_{EB} = -4V$
Collector-Emitter Cut-Off Current	$I_{CES}$		-100	nA	$V_{CES} = -200V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.2 -0.35	V	$I_C = -100mA, I_B = -10mA$ $I_C = -250mA, I_B = -25mA^*$
	$V_{BE(sat)}$		-1.0	V	$I_C = -250mA, I_B = -25mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-0.9	V	$I_C = -250mA,$ $V_{CE} = -10V^*$
Static Forward Current Transfer Ratio	$h_{FE}$	100 100 85 35	300		$I_C = -1mA, V_{CE} = -10V$ $I_C = -100mA, V_{CE} = -10V^*$ $I_C = -250mA, V_{CE} = -10V^*$ $I_C = -400mA, V_{CE} = -10V^*$
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 $\mu s$ . Duty cycle  $\leq 2\%$

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## TYPICAL CHARACTERISTICS

