

SOT223 PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

FZT591A

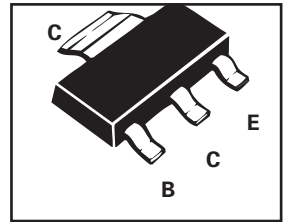
ISSUE 1 - DECEMBER 2001

FEATURES

Low equivalent on resistance $R_{CE(sat)} = 350m$ at 1A

PART MARKING DETAIL - FZT591A

COMPLEMENTARY TYPE - FZT491A



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	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}	2	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}C$

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

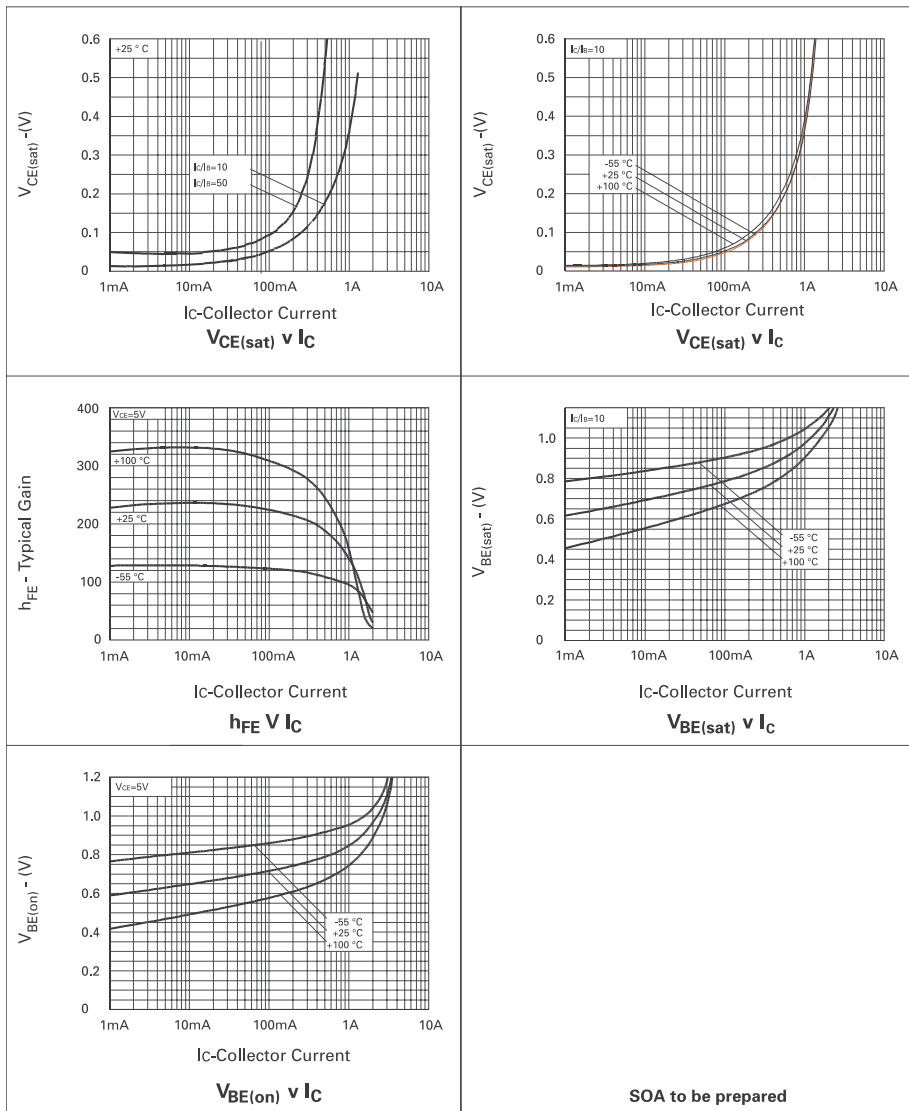
PARAMETER	SYMBOL	MIN.	MAX.	UNI T	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-40		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-40		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-100	nA	$V_{CB} = -30V$
Emitter Cut-Off Current	I_{EBO}		-100	nA	$V_{EB} = -4V$
Collector-Emitter Cut-Off Current	I_{CES}		-100	nA	$V_{CES} = -30V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.2 -0.35 -0.5	V	$I_C = -100mA, I_B = -1mA^*$ $I_C = -500mA, I_B = -20mA^*$ $I_C = -1A, I_B = -100mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.1	V	$I_C = -1A, I_B = -50mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$		-1.0	V	$I_C = -1A, V_{CE} = -5V^*$
Static Forward Current Transfer Ratio	h_{FE}	300 300 250 160 30	800		$I_C = -1mA,$ $I_C = -100mA^*,$ $I_C = -500mA^*, V_{CE} = -5V$ $I_C = -1A^*,$ $I_C = -2A^*,$
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 \otimes 2%

Spice parameter data is available upon request for this device

FZT591A

TYPICAL CHARACTERISTICS





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.