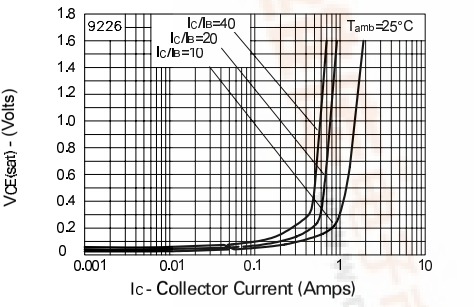
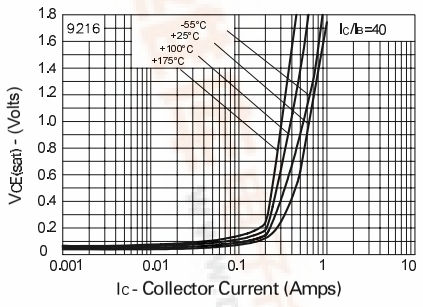
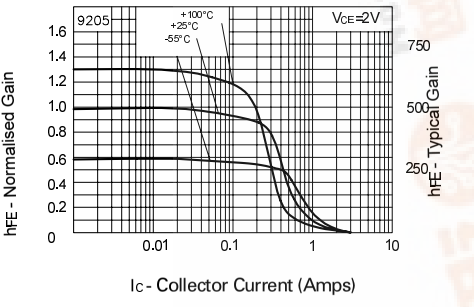
TYPICAL CHARACTERISTICS



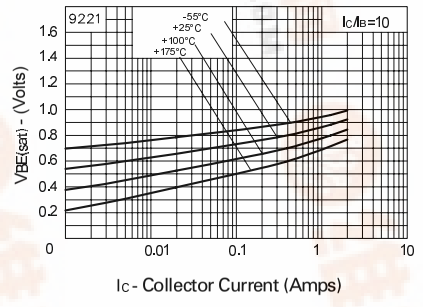
VCE(sat) v IC



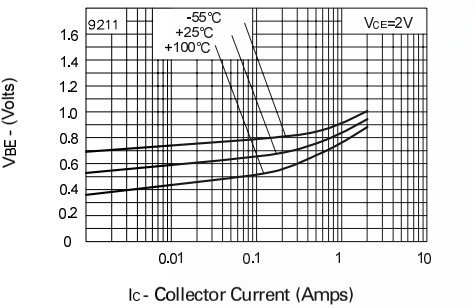
VCE(sat) v IC



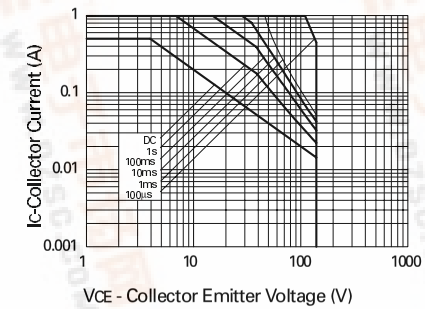
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area

SOT223 PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

FZT795A

ISSUE 3 - OCTOBER 1995

FEATURES

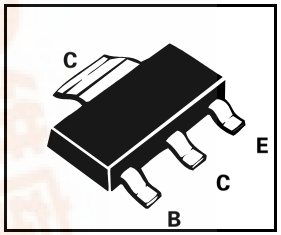
* 140 Volt V_{CEO}
* Gain of 250 at I_C=0.2 Amps and very low $V_{CE(sat)}$

APPLICATIONS

* Battery powered circuits

COMPLEMENTARY TYPE – FZT694B

PARTMARKING DETAIL – FZT795A



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-140	V
Collector-Emitter Voltage	V_{CEO}	-140	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-1	A
Continuous Collector Current	I_C	-500	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Breakdown Voltages	$V_{(BR)CBO}$	-140			V	I_C=-100µA
	$V_{(BR)CEO}$	-140			V	I_C=-10mA*
	$V_{(BR)EBO}$	-5			V	I_E=-100µA
Cut-Off Currents	I_{CBO}			-0.1	µA	V_{CB}=-100V
	I_{EBO}			-0.1	µA	V_{EB}=-4V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3 -0.3 -0.25	V V V	I_C=-100mA, I_B=-1mA* I_C=-200mA, I_B=-5mA* I_C=-500mA, I_B=-50mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.95	V	I_C=-500mA, I_B=-50mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.75		V	I_C=-500mA, V_{CE}=-2V*
Static Forward Current Transfer Ratio	h_{FE}	300 250 100		800		I_C=-10mA, V_{CE}=-2V* I_C=-200mA, V_{CE}=-2V* I_C=-300mA, V_{CE}=-2V*
Transition Frequency	f_T	100			MHz	I_C=-50mA, V_{CE}=-5V f=50MHz
Input Capacitance	C_{ibo}		225		pF	V_{EB}=-0.5V, f=1MHz
Output Capacitance	C_{obo}		15		pF	V_{CB}=-10V, f=1MHz
Switching Times	t_{on} t_{off}		100 1900		ns ns	I_C=-100mA, I_{B1}=-10mA I_{B2}=-10mA, V_{CC}=-50V

*Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%

Spice parameter data is available upon request for this device

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FZT795A

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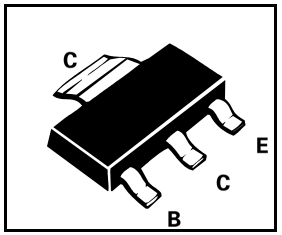
COMPLEMENTARY TYPE – FZT694B

PARTMARKING DETAIL – FZT795A



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Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3 -0.3 -0.25	V V V	I_C=-100mA, I_B=-1mA* I_C=-200mA, I_B=-5mA* I_C=-500mA, I_B=-50mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.95	V	I_C=-500mA, I_B=-50mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.75		V	I_C=-500mA, V_{CE}=-2V*
Static Forward Current Transfer Ratio	h_{FE}	300 250 100		800		I_C=-10mA, V_{CE}=-2V* I_C=-200mA, V_{CE}=-2V* I_C=-300mA, V_{CE}=-2V*
Transition Frequency	f_T	100			MHz	I_C=-50mA, V_{CE}=-5V f=50MHz
Input Capacitance	C_{ibo}		225		pF	V_{EB}=-0.5V, f=1MHz
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Switching Times	t_{on} t_{off}		100 1900		ns ns	I_C=-100mA, I_{B1}=-10mA I_{B2}=-10mA, V_{CC}=-50V

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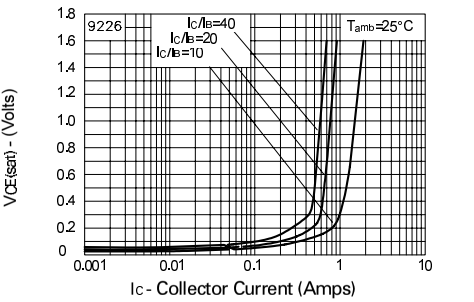
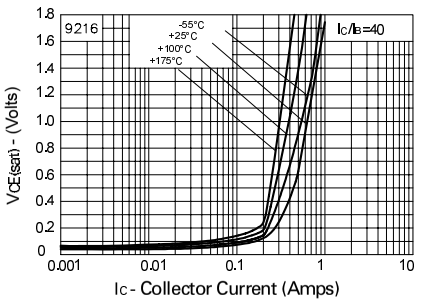
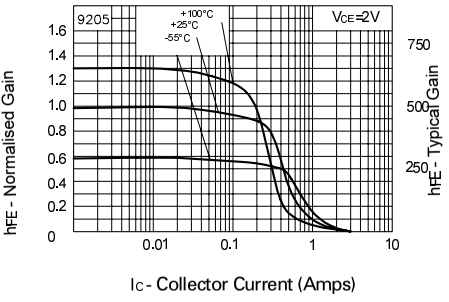
TYPICAL CHARACTERISTICS



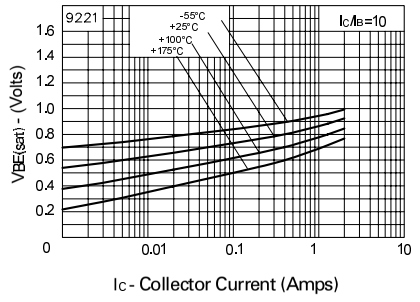
VCE(sat) v IC



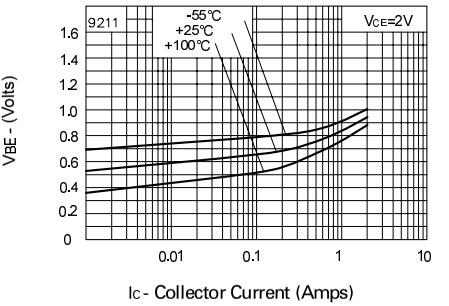
VCE(sat) v IC



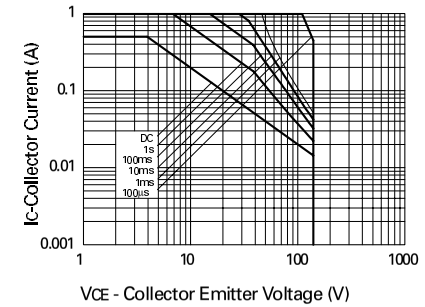
hFE v IC



VBE(sat) v IC



VBE(on) v IC



Safe Operating Area