



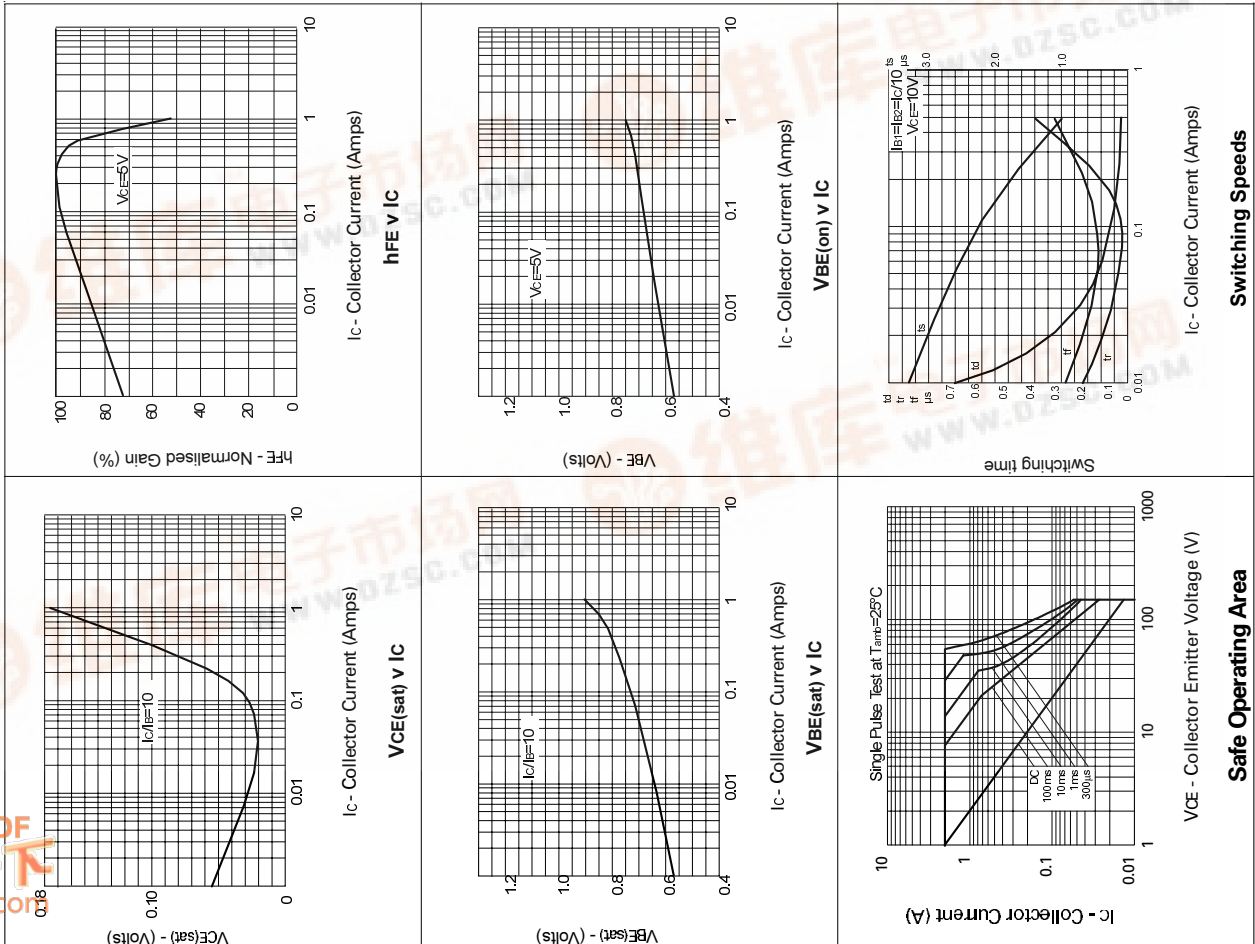
FZT655

SOT223 NPN SILICON PLANAR HIGH PERFORMANCE TRANSISTOR

ISSUE 3 – FEBRUARY 1995

FZT655

TYPICAL CHARACTERISTICS

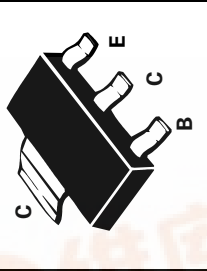


FEATURES

- * Low saturation voltage

COMPLEMENTARY TYPE – FZT755

PARTMARKING DETAIL – FZT655



ABSOLUTE MAXIMUM RATINGS.

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

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	150			V	$I_C = 100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	150			V	$I_C = 10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E = 100\mu A$
Collector Cut-Off Current	I_{CBO}			0.1	μA	$V_{CE} = 125V$
Emitter Cut-Off Current	I_{EBO}			0.1	μA	$V_{EB} = 3V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.5	0.5	V	$I_C = 500mA, I_B = 50mA^*$ $I_C = 1A, I_B = 200mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.1	V	$I_C = 500mA, I_B = 50mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			1.0	V	$I_C = 500mA, V_{CE} = 5V^*$
Static Forward Current Transfer Ratio	h_{FE}	50		300		$I_C = 10mA, V_{CE} = 5V^*$ $I_C = 500mA, V_{CE} = 5V^*$ $I_C = 1A, V_{CE} = 5V^*$
Transition Frequency	f_T	30			MHz	$I_C = 10mA, V_{CE} = 20V$ $f = 20MHz$
Output Capacitance	C_{obo}			20	pF	$V_{CB} = 10V, f = 1MHz$

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

查询FZT655供应商

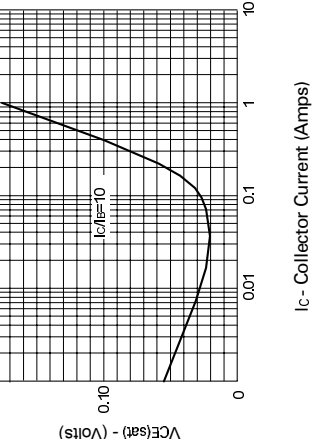
捷多邦, 专业PCB打样工厂, 24小时加急出货

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TYPICAL CHARACTERISTICS

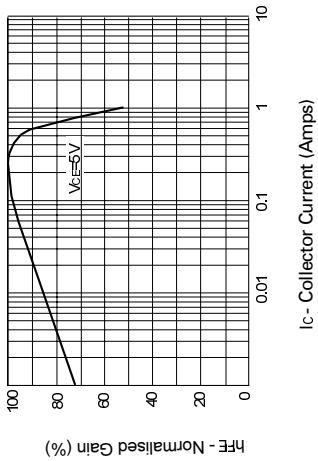
FEATURES

* Low saturation voltage



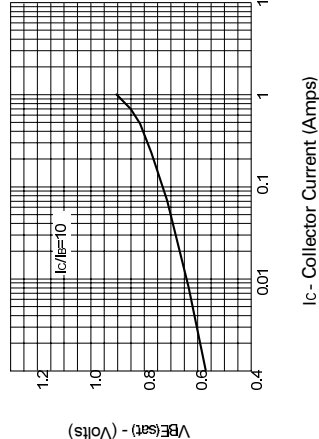
IC - Collector Current (Amps)

VCE(sat) v IC



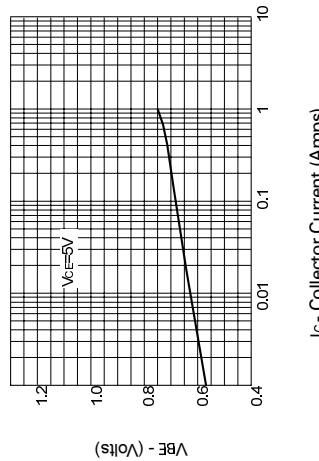
IC - Collector Current (Amps)

hFE v IC



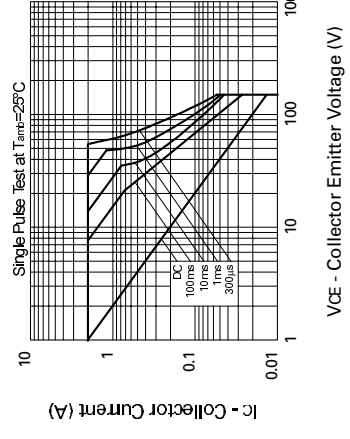
IC - Collector Current (Amps)

VBE(sat) v IC



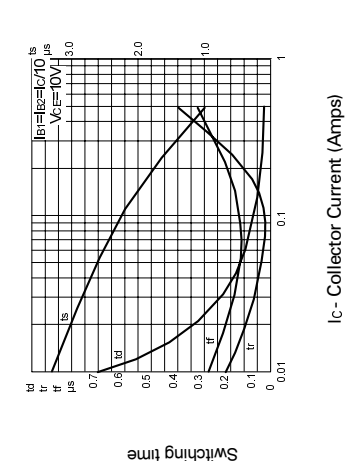
IC - Collector Current (Amps)

VBE(on) v IC



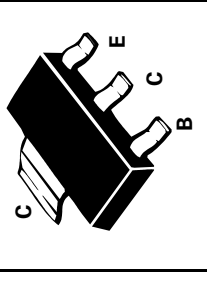
VCE - Collector Emitter Voltage (V)

Safe Operating Area



IC - Collector Current (Amps)

Switching Speeds



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V _{CBO}	150	V
Collector-Emitter Voltage	V _{CEO}	150	V
Emitter-Base Voltage	V _{EBO}	5	V
Peak Pulse Current	I _{CM}	2	A
Continuous Collector Current	I _C	1	A
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 unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	V _{(BR)CBO}	150			V	I _C =100µA
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	150			V	I _C =10mA*
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	5			V	I _E =100µA
Collector Cut-Off Current	I _{CBO}			0.1	µA	V _{CE} =125V
Emitter Cut-Off Current	I _{EBO}			0.1	µA	V _{EB} =3V
Collector-Emitter Saturation Voltage	V _{CE(sat)}			0.5	V	I _C =500mA, I _B =50mA*
				0.5	V	I _C =1A, I _B =200mA*
Base-Emitter Saturation Voltage	V _{BE(sat)}			1.1	V	I _C =500mA, I _B =50mA*
Base-Emitter Turn-On Voltage	V _{BE(on)}			1.0	V	I _C =500mA, V _{CE} =5V*
Static Forward Current Transfer Ratio	h _{FE}	50		300		I _C =10mA, V _{CE} =5V*
		50				I _C =500mA, V _{CE} =5V*
		20				I _C =1A, V _{CE} =5V*
Transition Frequency	f _T	30			MHz	I _C =10mA, V _{CE} =20V
Output Capacitance	C _{obo}			20	pF	V _{CB} =10V, f=1MHz

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