SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FZT757

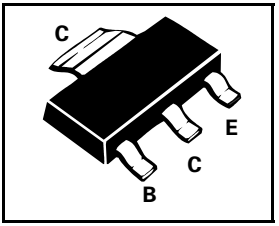
ISSUE 4– JANUARY 1996

FEATURES

* Low saturation voltage
* 300V V_{CEO}

COMPLEMENTARY TYPE - FZT657

PARTMARKING DETAIL - FZT757



ABSOLUTE MAXIMUM RATINGS.

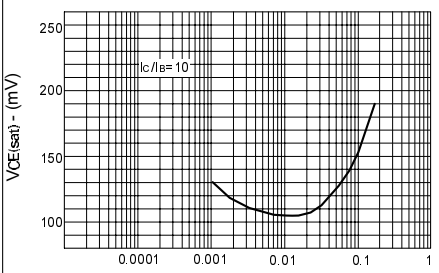
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-300	V
Collector-Emitter Voltage	V_{CEO}	-300	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-1	A
Continuous Collector Current	I_C	-0.5	A
Power Dissipation at T_{amb}=25°C	P_{tot}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-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	$V_{(BR)CBO}$	-300			V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300			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_{CB}=-200V
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	V_{EB}=-3V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	I_C=-100mA, I_B=-10mA*
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.0	V	I_C=-100mA, I_B=-10mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			-1.0	V	I_C=-100mA, V_{CE}=-5V*
Static Forward Current Transfer Ratio	h_{FE}	40 50				I_C=-10mA, V_{CE}=-5V* I_C=-100mA, 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}=-20V, f=1MHz

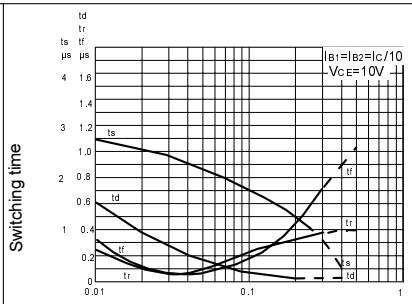
*Measured under pulsed conditions. Pulse Width=300μs. Duty cycle ≤2%
Spice parameter data is available upon request for this device

TYPICAL CHARACTERISTICS



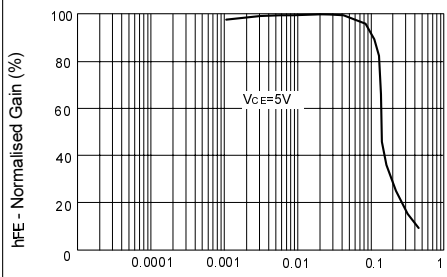
IC - Collector Current (Amps)

VCE(sat) v IC



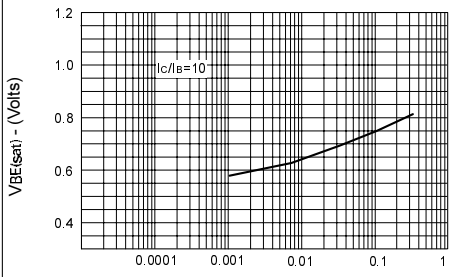
IC - Collector Current (Amps)

Switching Speeds



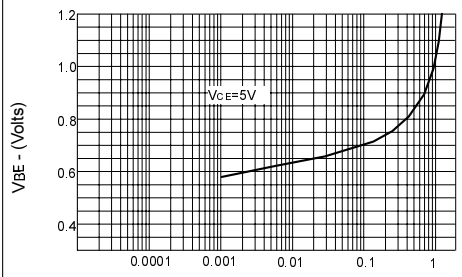
IC - Collector Current (Amps)

hFE v IC



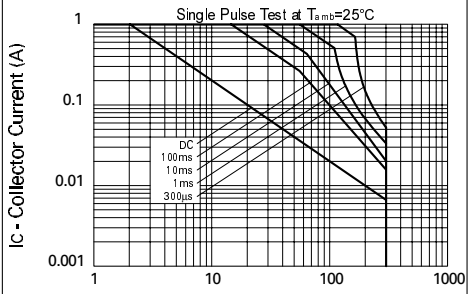
IC - Collector Current (Amps)

VBE(sat) v IC



IC - Collector Current (Amps)

VBE(on) v IC



VCE - Collector Emitter Voltage (V)

Safe Operating Area