

NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

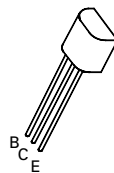
FXT655

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FEATURES

- * 150 Volt V_{CE0}
- * 1 Amp continuous current
- * Low saturation voltage
- * $P_{tot} = 1$ Watt

REFER TO ZTX655 FOR GRAPHS



E-Line
TO92 Compatible

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}	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	150			V	$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	150			V	$I_C=10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}			100	nA	$V_{CB}=125V, I_E=0$
Emitter Cut-Off Current	I_{EBO}			100	nA	$V_{EB}=3V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5 0.5	V 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	V	$I_C=500mA, V_{CE}=5V^*$
Static Forward Current Transfer Ratio	h_{FE}	50 50 20				$I_C=10mA, V_{CE}=5V$ $I_C=500mA, V_{CE}=5V^*$ $I_C=1A, V_{CE}=5V^*$
Transition Frequency	f_T	30			MHz	$I_C=10mA, V_{CE}=20V$ $f=20MHz$
Output Capacitance	C_{obo}			20	pF	$V_{CB}=20V, f=1MHz$

*Measured under pulsed conditions. Pulse Width=300 μs . Duty cycle $\leq 2\%$