

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

ISSUE 1 – FEB 94

FEATURES

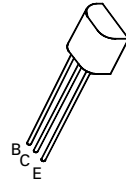
- * 100 Volt V_{CE0}
- * 2 Amp continuous current
- * $P_{tot} = 1$ Watt

APPLICATIONS

- * Lamp, relay or solenoid drivers
- * Audio circuits
- * Replacement of TO126 and TO220 devices

REFER TO ZTX753 FOR GRAPHS

FXT753



**E-Line
TO92 Compatible**

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-6	A
Continuous Collector Current	I_C	-2	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 $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-120			V	$I_C = -100\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-100			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}			-0.1 -10	μA μA	$V_{CB} = -100V, I_E = 0$ $V_{CB} = -100V, T_{amb} = 100^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB} = -4V, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.17 -0.30	-0.3 -0.5	V V	$I_C = -1A, I_B = -100mA^*$ $I_C = -2A, I_B = -200mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.90	-1.25	V	$I_C = -1A, I_B = -100mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.8	-1.0	V	$I_C = -1A, V_{CE} = -2V^*$
Static Forward Current Transfer Ratio	h_{FE}	70 100 55 25	200 200 170 55	300		$I_C = -50mA, V_{CE} = -2V^*$ $I_C = -500mA, V_{CE} = -2V^*$ $I_C = -1A, V_{CE} = -2V^*$ $I_C = -2A, V_{CE} = -2V^*$
Transition Frequency	f_T	100	140		MHz	$I_C = -100mA, V_{CE} = -5V$ $f = 100MHz$
Output Capacitance	C_{obo}			30	pF	$V_{CB} = -10V, f = 1MHz$

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