

PNP SILICON PLANAR MEDIUM POWER TRANSISTOR

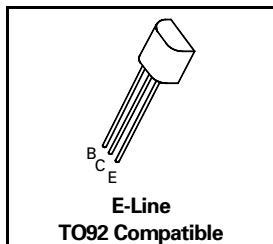
FXT749

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FEATURES

- * 25 Volt V_{CEO}
- * 2 Amp continuous current
- * Low saturation voltage
- * $P_{tot} = 1$ Watt

REFER TO ZTX749 FOR GRAPHS



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-35	V
Collector-Emitter Voltage	V_{CEO}	-25	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 $T_{amb}=25^\circ\text{C}$	P_{tot}	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-35			V	$I_C = -100\mu\text{A}$, $I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-25			V	$I_C = -10\text{mA}$, $I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -100\mu\text{A}$, $I_C = 0$
Collector Cut-Off Current	I_{CBO}			-0.1 -10	μA μA	$V_{CB} = -30\text{V}$ $V_{CB} = -30\text{V}$, $T_{amb} = 100^\circ\text{C}$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB} = -4\text{V}$, $I_E = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.12 -0.23	-0.3 -0.5	V V	$I_C = -1\text{A}$, $I_B = -100\text{mA}^*$ $I_C = -2\text{A}$, $I_B = -200\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	-1.25	V	$I_C = -1\text{A}$, $I_B = -100\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.8	-1	V	$I_C = -1\text{A}$, $V_{CE} = -2\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	70 100 75 15	200 200 150 50	300		$I_C = -50\text{mA}$, $V_{CE} = -2\text{V}^*$ $I_C = -1\text{A}$, $V_{CE} = -2\text{V}^*$ $I_C = -2\text{A}$, $V_{CE} = -2\text{V}^*$ $I_C = -6\text{A}$, $V_{CE} = -2\text{V}^*$
Transition Frequency	f_T	100	160		MHz	$I_C = -100\text{mA}$, $V_{CE} = -5\text{V}$ $f = 100\text{MHz}$
Output Capacitance	C_{obo}			100	pF	$V_{CB} = -10\text{V}$, $f = 1\text{MHz}$

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