

**DISCONTINUED**  
**PLEASE USE ZTX614**

# NPN SILICON PLANAR MEDIUM POWER DARLINGTON TRANSISTOR

## FXT614

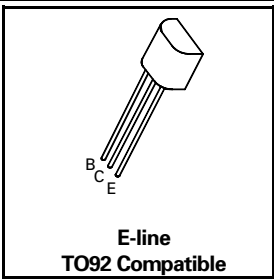
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**FEATURES**

- \* 100 Volt  $V_{CE0}$
- \* 800 mA continuous current
- \* Gain of 10K at  $I_C=500mA$
- \*  $P_{tot} = 1$  Watt

**APPLICATIONS**

- \* Lamp, solenoid and relay drivers
- REFER TO BCX38 FOR GRAPHS



**ABSOLUTE MAXIMUM RATINGS.**

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	120	V
Collector-Emitter Voltage	$V_{CEO}$	100	V
Emitter-Base Voltage	$V_{EBO}$	10	V
Continuous Collector Current	$I_C$	800	mA
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	$V_{(BR)CBO}$	120			V	$I_C=10\mu A, I_E=0$
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	100			V	$I_C=10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	10			V	$I_E=10\mu A, I_C=0$
Collector Cut-Off Current	$I_{CBO}$			100	nA	$V_{CB}=60V, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$			100	nA	$V_{EB}=8V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			1.25	V	$I_C=800mA, I_B=8mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			1.8	V	$I_C=800mA, V_{CE}=5V^*$
Static Forward Current Transfer Ratio	$h_{FE}$	5000 10000				$I_C=100mA, V_{CE}=5V^*$ $I_C=500mA, V_{CE}=5V^*$

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