



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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NPN SILICON PLANAR MEDIUM POWER DARLINGTON TRANSISTOR

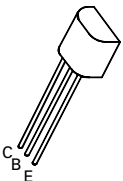
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ZTX614

FEATURES

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

REFER TO BCX38 FOR GRAPHS



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}	10	V
Continuous Collector Current	I_C	800	mA
Power Dissipation at $T_{\text{amb}}=25^\circ\text{C}$ derate above 25°C	P_{tot}	1.0 5.7	W mW/ $^\circ\text{C}$
Operating and Storage Temperature Range	$T_j; T_{\text{stg}}$	-55 to +200	$^\circ\text{C}$

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

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

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