



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



NPN SILICON PLANAR AVALANCHE TRANSISTOR

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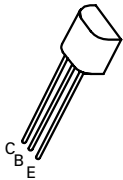
ZTX415

FEATURES

- * Specifically designed for Avalanche mode operation
- * 60A Peak Avalanche Current (Pulse width=20ns)
- * Low inductance package

APPLICATIONS

- * Laser LED drivers
- * Fast edge generation
- * High speed pulse generators
- * Suitable for single, series and parallel operation



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	260	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	6	V
Continuous Collector Current	I_C	500	mA
Peak Collector Current (Pulse Width=20ns)	I_{CM}	60	A
Power Dissipation	P_{tot}	680	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +175	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CES}$	260			V	$I_C=1mA$ $T_{amb} = -55$ to $+175^{\circ}C$
Collector-Emitter Breakdown Voltage	$V_{CEO(sus)}$	100			V	$I_C=100\mu A$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6			V	$I_E=10\mu A$
Collector Cut-Off Current	I_{CBO}			0.1 10	μA μA	$V_{CB}=180V$ $V_{CB}=180V, T_{amb}=100^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			0.1	μA	$V_{EB}=4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5	V	$I_C=10mA, I_B=1mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			0.9	V	$I_C=10mA, I_B=1mA^*$
Current in Second Breakdown (Pulsed)	I_{SB}	15 25			A A	$V_C=200V, C_{CE}=620pF$ $V_C=250V, C_{CE}=620pF$
Static Forward Current Transfer Ratio	h_{FE}	25				$I_C=10mA, V_{CE}=10V^*$
Transition Frequency	f_T	40			MHz	$I_C=10mA, V_{CE}=20V$ $f=20MHz$
Collector-Base Capacitance	C_{cb}			8	pF	$V_{CB}=20V, I_E=0$ $f=100MHz$

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

ZTX415

TYPICAL CHARACTERISTICS

