



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.

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PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

ZTX718

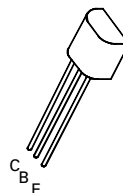
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FEATURES

- * 6A Peak pulse current
- * Excellent h_{FE} characteristics up to 6A (pulsed)
- * low saturation voltage
- * I_C Cont 2.5A

APPLICATIONS

- * Power MOSFET gate driver in conjunction with complementary ZTX618



E-Line
T092 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-20	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-6	A
Continuous Collector Current	I_C	-2.5	A
Base Current	I_B	-500	mA
Practical Power Dissipation*	P_{totp}	1.5	W
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	1	W
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +200	$^{\circ}C$

* Device mounted on P.C.B. with copper equal to 1 sq. Inch minimum.

ZTX718

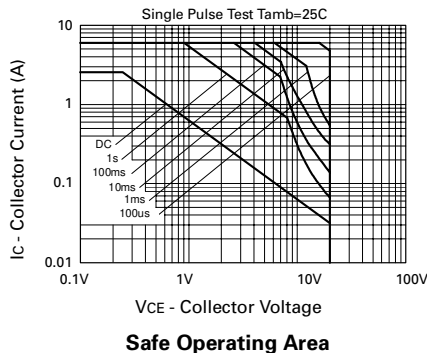
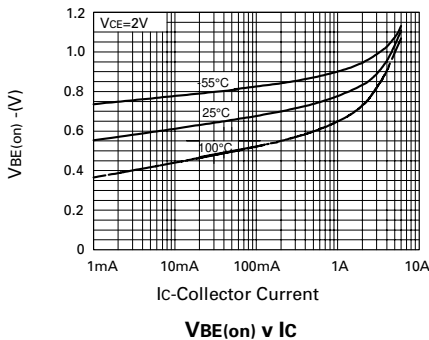
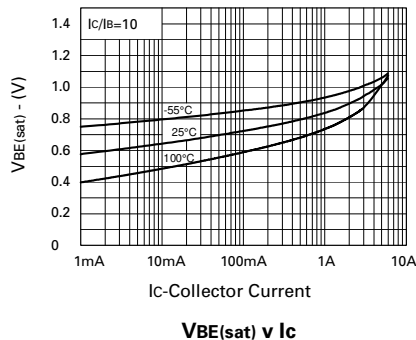
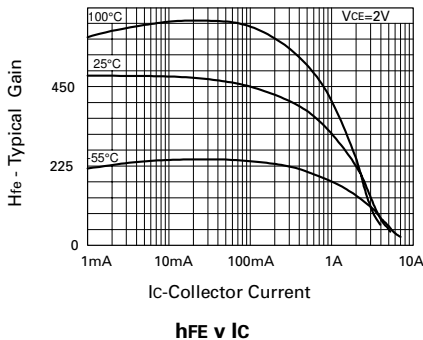
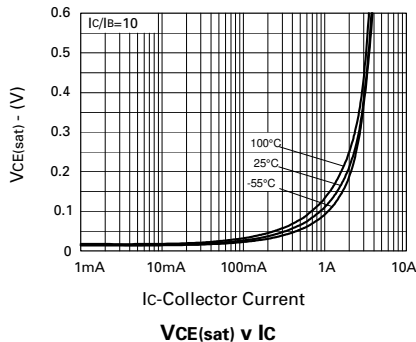
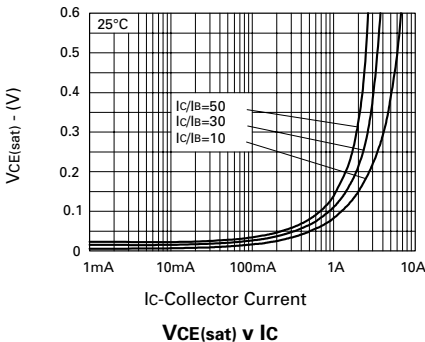
ELECTRIAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-20	-65		V	$I_C = -100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20	-55		V	$I_C = -10\text{mA}^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-8.8		V	$I_E = -100\mu\text{A}$
Collector Cut-Off Current	I_{CBO}			-100	nA	$V_{CB} = -15\text{V}$
Emitter Cut-Off Current	I_{EBO}			-100	nA	$V_{EB} = -4\text{V}$
Collector Emitter Cut-Off Current	I_{CES}			-100	nA	$V_{CES} = -15\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-16 -130 -145 -190	-40 -200 -220 -260	mV mV mV mV	$I_C = -0.1\text{A}, I_B = -10\text{mA}^*$ $I_C = -1\text{A}, I_B = -20\text{mA}^*$ $I_C = -1.5\text{A}, I_B = -50\text{mA}^*$ $I_C = -2.5\text{A}, I_B = -200\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.98	-1.1	V	$I_C = -2.5\text{A}, I_B = -200\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-0.85	-0.95	V	$I_C = -2.5\text{A}, V_{CE} = -2\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	300 300 150 35 15	475 450 230 70 30			$I_C = -10\text{mA}, V_{CE} = -2\text{V}^*$ $I_C = -100\text{mA}, V_{CE} = -2\text{V}^*$ $I_C = -2\text{A}, V_{CE} = -2\text{V}^*$ $I_C = -4\text{A}, V_{CE} = -2\text{V}^*$ $I_C = -6\text{A}, V_{CE} = -2\text{V}^*$
Transition Frequency	f_T	150	180		MHz	$I_C = -50\text{mA}, V_{CE} = -10\text{V}$ $f = 100\text{MHz}$
Output Capacitance	C_{obo}		21	30	pF	$V_{CB} = -10\text{V}, f = 1\text{MHz}$
Turn-On Time	$t_{(on)}$		40		ns	$V_{CC} = -10\text{V}, I_C = -1\text{A}$ $I_{B1} = I_{B2} = 20\text{mA}$
Turn-Off Time	$t_{(off)}$		670		ns	

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

ZTX718

TYPICAL CHARACTERISTICS

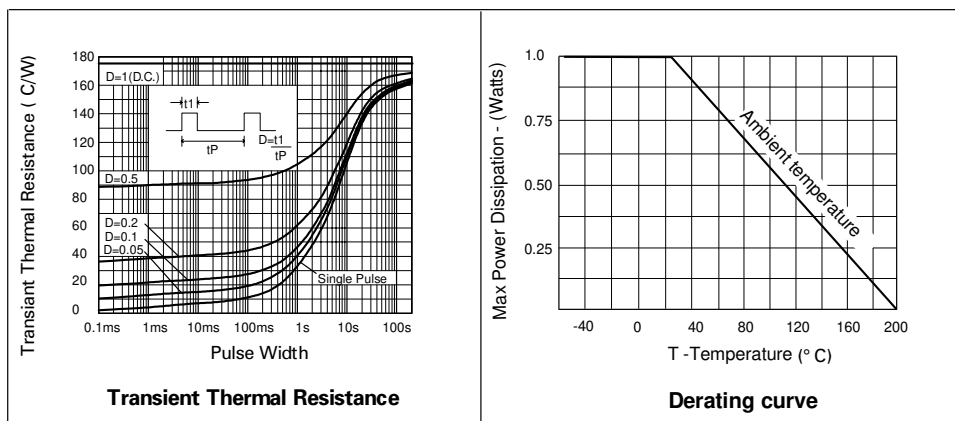


ZTX718

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MAX.	UNIT
Thermal Resistance: Junction to Ambient ₁	$R_{th(j-amb)1}$	175	°C/W
Junction to Ambient ₂	$R_{th(j-amb)2} \dagger$	116	°C/W

† Device mounted on P.C.B. with copper equal to 1 sq. Inch minimum.



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