

NPN SILICON PLANAR MEDIUM POWER TRANSISTORS

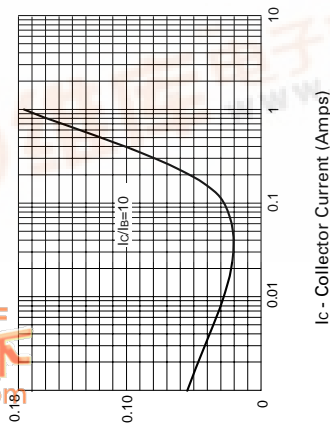
ZTX654 ZTX655

ISSUE 2 - JULY 94

FEATURES

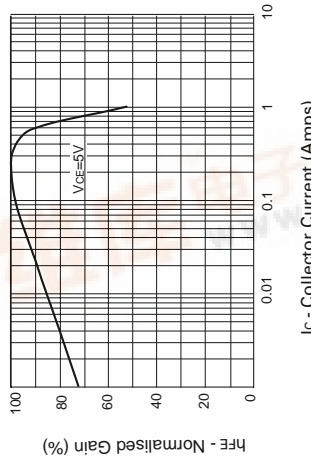
- * 150 Volt V_{CE0}
- * 1 Amp continuous current
- * Low saturation voltage
- * $P_{tot} = 1$ Watt

TYPICAL CHARACTERISTICS



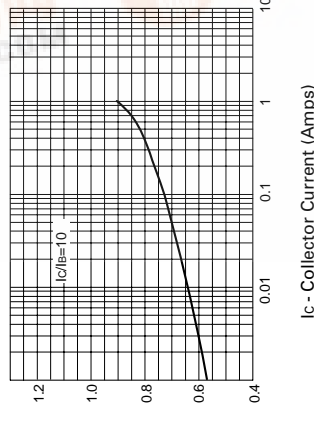
VCE(sat) v IC

IC - Collector Current (Amps)



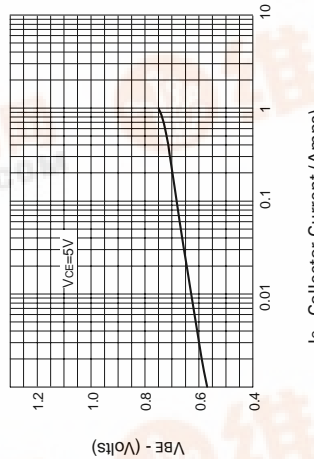
hFE v IC

IC - Collector Current (Amps)



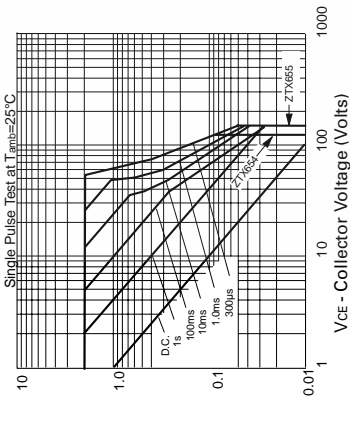
VBE(on) v IC

IC - Collector Current (Amps)



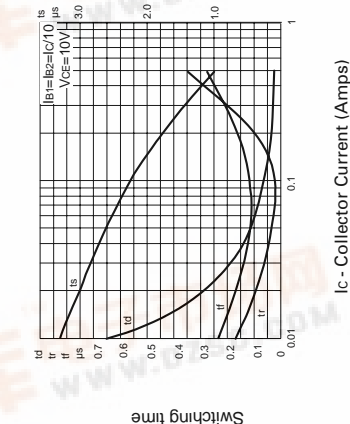
VBE(off) v IC

IC - Collector Current (Amps)



Safe Operating Area

VCE - Collector Voltage (Volts)



Switching Speeds

IC - Collector Current (Amps)

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	ZTX654	ZTX655	UNIT
Collector-Base Voltage	V_{CB0}	125	150	V
Collector-Emitter Voltage	V_{CE0}	125	150	V
Emitter-Base Voltage	V_{EB0}	5	5	V
Peak Pulse Current	I_{CM}	2	2	A
Continuous Collector Current	I_C	1	1	A
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	1	1	W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200		$^{\circ}C$

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

PARAMETER	SYMBOL	ZTX654		ZTX655		CONDITIONS.
		MIN.	MAX.	MIN.	MAX.	
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	125	150			$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	125	150			$I_C=10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	5			$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}		100		100	$V_{CB}=100V, I_E=0$ $V_{CE}=125V, I_E=0$
Emitter Cut-Off Current	I_{EBO}		100		100	$V_{EB}=3V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	0.5	0.5	0.5	0.5	$I_C=500mA, I_E=50mA^*$ $I_C=1A, I_B=200mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	1.1	1.1	1.1	1.1	$I_C=500mA, I_B=50mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	1.0	1.0	1.0	1.0	$I_C=500mA, V_{CE}=5V^*$
Static Forward Current Transfer Ratio	h_{FE}	50	50	50	50	$I_C=10mA, V_{CE}=5V$ $I_C=500mA, V_{CE}=5V^*$ $I_C=1A, V_{CE}=5V^*$
Transition Frequency	f_T	30	30	30	30	$I_C=10mA, V_{CE}=20V$ $f=20MHz$
Output Capacitance	C_{obo}	20	20	20	20	$V_{CB}=20V, f=1MHz$

查询ZTX654供应商

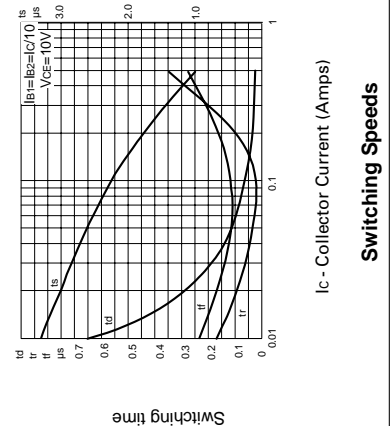
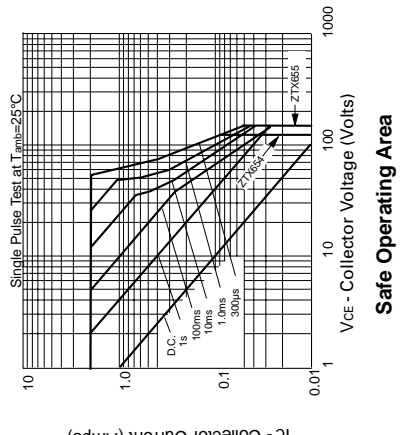
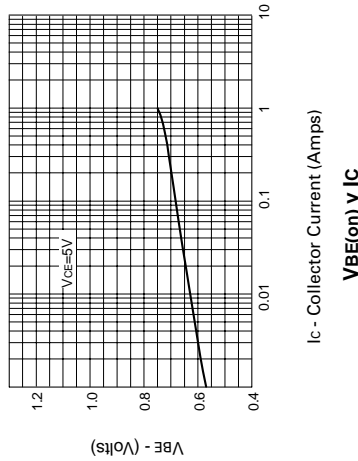
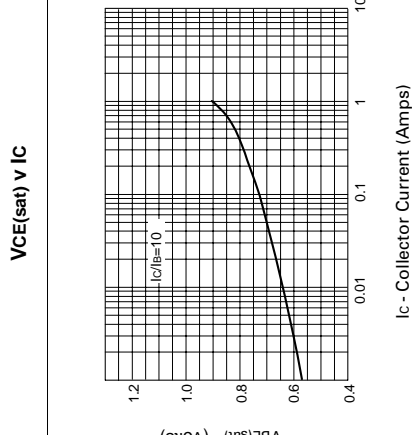
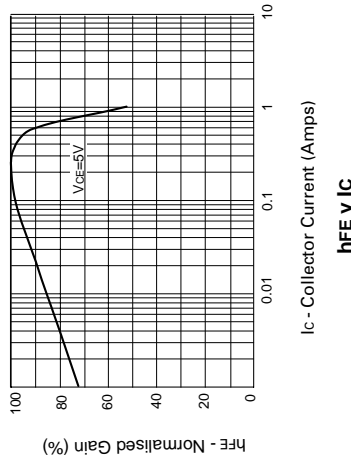
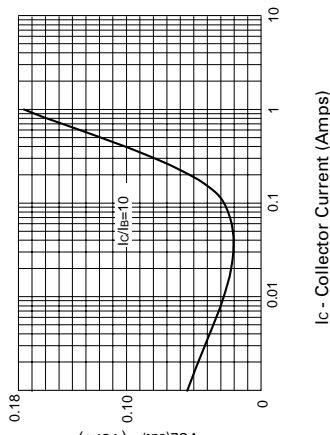
捷多邦, 专业PCB打样工厂, 24小时加急出货

ZTX654 ZTX655

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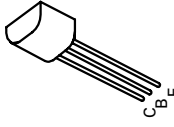
ZTX654 ZTX655

TYPICAL CHARACTERISTICS



FEATURES

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



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	ZTX654	ZTX655	UNIT
Collector-Base Voltage	V_{CB0}	125	150	V
Collector-Emitter Voltage	V_{CEO}	125	150	V
Emitter-Base Voltage	V_{EBO}	5	5	V
Peak Pulse Current	I_{CM}	2	2	A
Continuous Collector Current	I_C	1	1	A
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	1	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	ZTX654		ZTX655		CONDITIONS.
		MIN.	MAX.	MIN.	MAX.	
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	125		150		$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	125		150		$I_C=10\text{mA}, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		5		$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}		100		100	$V_{CB}=100\text{V}, I_E=0$ $V_{CB}=125\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}		100		100	$V_{EB}=3\text{V}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	0.5	0.5	0.5	0.5	$I_C=500\text{mA}, I_E=50\text{mA}^*$ $I_C=1\text{A}, I_B=200\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	1.1	1.1	1.1	1.1	$I_C=500\text{mA}, I_B=50\text{mA}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	1.0	1.0	1.0	1.0	$I_C=500\text{mA}, V_{CE}=5\text{V}^*$
Static Forward Current Transfer Ratio	h_{FE}	50	50	50	50	$I_C=10\text{mA}, V_{CE}=5\text{V}$ $I_C=500\text{mA}, V_{CE}=5\text{V}^*$ $I_C=1\text{A}, V_{CE}=5\text{V}^*$
Transition Frequency	f_T	30	30	30	30	$I_C=10\text{mA}, V_{CE}=20\text{V}$ $f=20\text{MHz}$
Output Capacitance	C_{obo}	20	20	20	20	$V_{CB}=20\text{V}, f=1\text{MHz}$