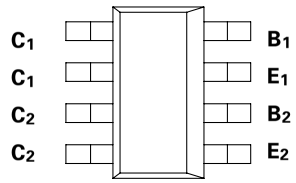
THE DATASHEET OF

ZDT1147TA

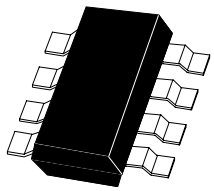
SM-8 DUAL NPN MEDIUM POWER DARLINGTON TRANSISTORS

ISSUE 1 - NOVEMBER 1995

ZDT605



PARTMARKING DETAIL – T605



SM-8
(8 LEAD SOT223)

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	140	V
Collector-Emitter Voltage	V_{CEO}	120	V
Emitter-Base Voltage	V_{EBO}	10	V
Peak Pulse Current	I_{CM}	4	A
Continuous Collector Current	I_C	1	A
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Total Power Dissipation at T_{amb}= 25°C* Any single die “on” Both die “on” equally	P_{tot}	 2.25 2.75	 W W
Derate above 25°C* Any single die “on” Both die “on” equally		 18 22	 mW/ °C mW/ °C
Thermal Resistance - Junction to Ambient* Any single die “on” Both die “on” equally		 55.6 45.5	 °C/ W °C/ W

* The power which can be dissipated assuming the device is mounted in a typical manner on a PCB with copper equal to 2 inches square.

ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$
Collector-Emitter Breakdown Voltage	$V_{CEO(SUS)}$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$
Collector Cutoff Current	I_{CBO}
Collector Cutoff Current	I_{CES}
Emitter Cutoff Current	I_{EBO}
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$
Base-Emitter TurnOn Voltage	$V_{BE(on)}$
Static Forward Current Transfer Ratio	h_{FE}
Transition Frequency	f_T
Input Capacitance	C_{ibo}
Output Capacitance	C_{obo}
Switching Times	t_{on}
	t_{off}

*Measured under pulsed conditions. Pulse

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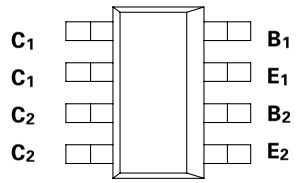

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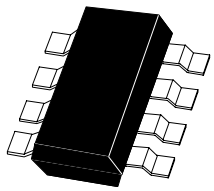

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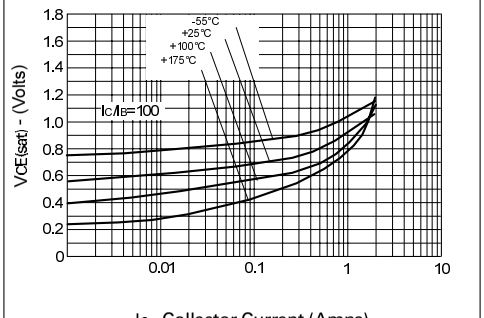
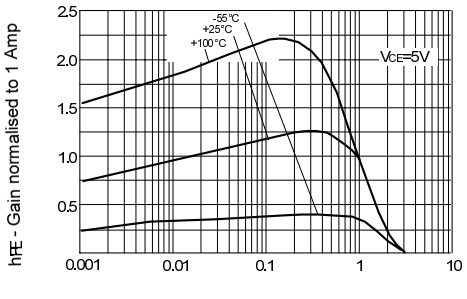
TYPICAL CHARACTERISTICS



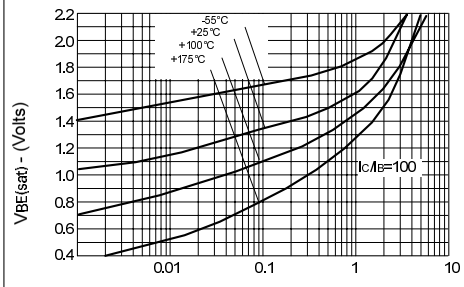
IC - Collector Current (Amps)

VCE(sat) v IC



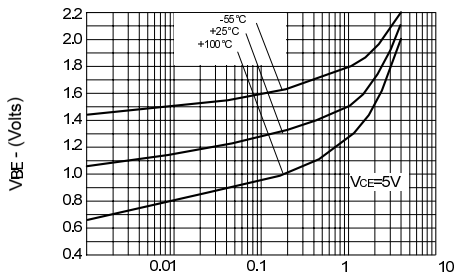
IC - Collector Current (Amps)

hFE v IC



IC - Collector Current (Amps)

VBE(sat) v IC



IC - Collector Current (Amps)

VBE(on) v IC

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