

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS

Parameters	Symbols	Limits (DTC144T□)					UNITS
		M	E	UA	KA	CA	
Collector-Base Voltage	$V_{(BR)CBO}$			50			V
Collector-Emitter Voltage	$V_{(BR)CEO}$			50			V
Emitter-Base Voltage	$V_{(BR)EBO}$			5			V
Collector Current - Continuous	I_C			100			mA
Collector Power Dissipation	P_C	150		200		300	mW
Junction Temperature	T_j			150			°C
Junction and Storage Temperature	T_{stg}			-55~+150			°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$			0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.5	μA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	100	300	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.3	V
Transition frequency	f_T	$V_{CE}=10V, I_E=-5mA,$ $f=100MHz$		250		MHz
Input resistor	R1		32.9	47	61.1	k Ω

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