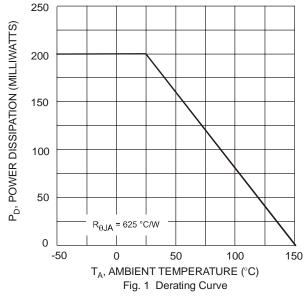


### **Electrical Characteristics** @T<sub>A</sub> = 25°C unless otherwise specified

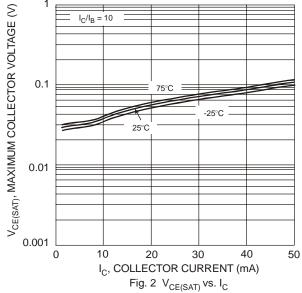
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Collector-Base Breakdown Voltage	$BV_{CBO}$	50	_	_	V	$I_C = 50\mu A$
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	50			٧	$I_C = 1mA$
Emitter-Base Breakdown Voltage	$BV_{EBO}$	5	_		V	$I_E = 50\mu A$
Collector Cutoff Current	I <sub>CBO</sub>	_	_	0.5	μА	$V_{CB} = 50V$
Emitter Cutoff Current	I <sub>EBO</sub>		_	0.5	μА	$V_{EB} = 4V$
Collector-Emitter Saturation Voltage	VCE(sat)	I	l	0.3	>	$\begin{split} & I_{C/IB} = 10 \text{mA}/1 \text{mA} & \text{DDTC113TUA} \\ & I_{C/IB} = 5 \text{mA}/0.5 \text{mA} & \text{DDTC123TUA} \\ & I_{C/IB} = 2.5 \text{mA}/.25 \text{mA} & \text{DDTC143TUA} \\ & I_{C/IB} = 1 \text{mA}/.1 \text{mA} & \text{DDTC114TUA} \\ & I_{C/IB} = 5 \text{mA}/0.5 \text{mA} & \text{DDTC124TUA} \\ & I_{C/IB} = 2.5 \text{mA}/.25 \text{mA} & \text{DDTC144TUA} \\ & I_{C/IB} = 1 \text{mA}/0.1 \text{mA} & \text{DDTC115TUA} \\ & I_{C/IB} = .5 \text{mA}/.05 \text{mA} & \text{DDTC125TUA} \\ \end{split}$
DC Current Transfer Ratio	$h_{FE}$	100	250	600		$I_C = 1mA$ , $V_{CE} = 5V$
Input Resistor (R <sub>1</sub> ) Tolerance	$\Delta R_1$	-30	_	+30	%	_
Gain-Bandwidth Product*	f⊤	_	250		MHz	$V_{CE} = 10V, I_E = -5mA,$ f = 100MHz

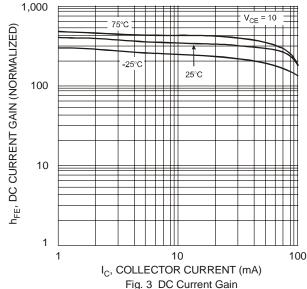
<sup>\*</sup>Transistor - For Reference Only

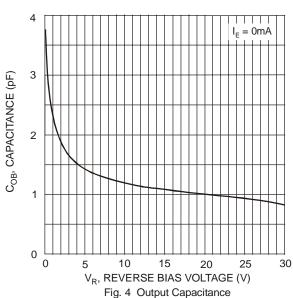
# Typical Curves - DDTC114TUA





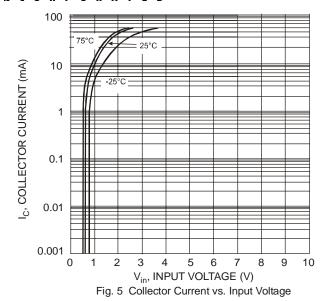


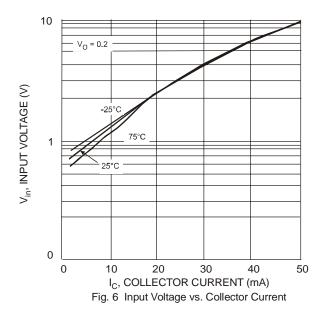




DDTC (R1-ONLY SERIES) UA © Diodes Incorporated





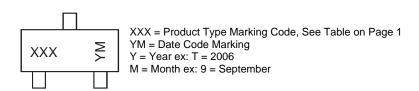


### Ordering Information (Note 4 & 5)

Device	Packaging	Shipping			
DDTC1xxTUA-7-F	SOT-323	3000/Tape & Reel			
DDTC1xxTUA-13-F	SOT-323	10,000/Tape & Reel			

Notes: 5. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

## **Marking Information**



Date Code Key

Year	2006		2007	007 2008		2009		2010		2011	2012	
Code	Т	T U V W		٧	X		Υ		Z			
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D

#### IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

#### LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.