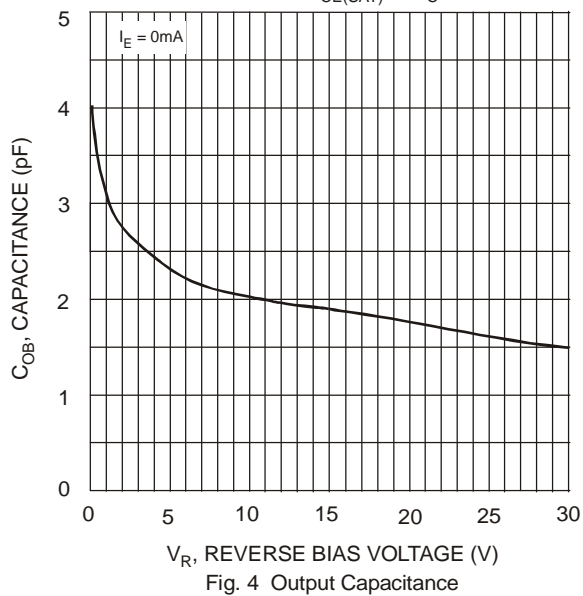
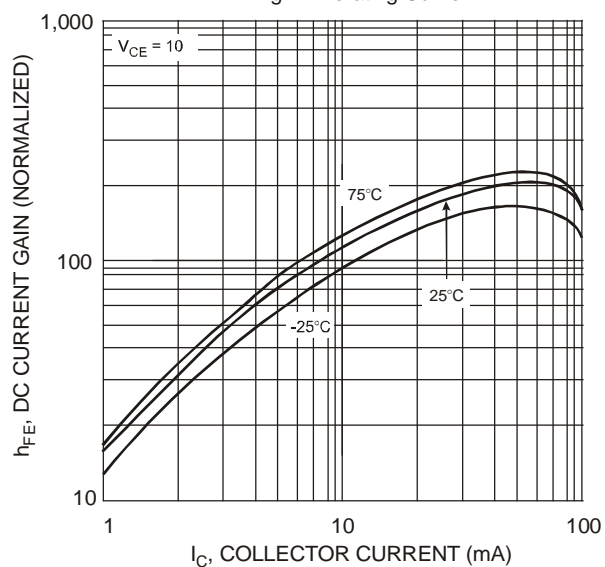
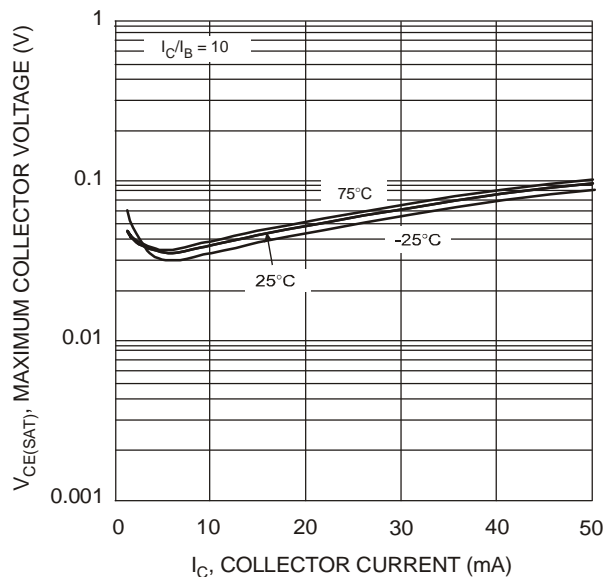
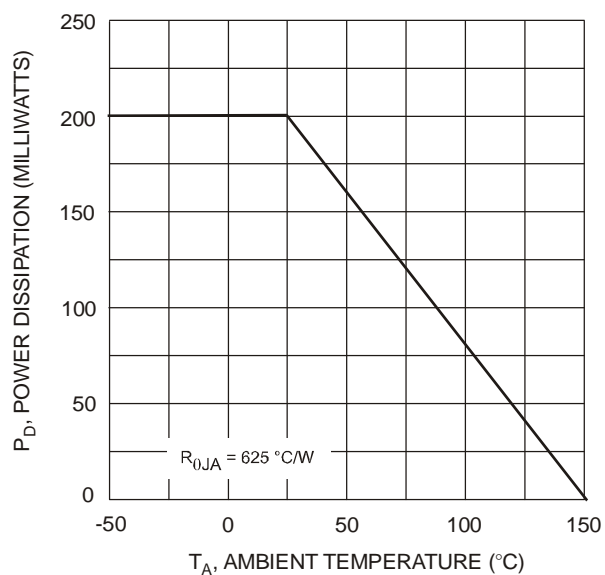


## Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic		Symbol	Min	Typ	Max	Unit	Test Condition
Collector-Base Breakdown Voltage		BV <sub>CBO</sub>	50	—	—	V	I <sub>C</sub> = 50μA
Collector-Emitter Breakdown Voltage		BV <sub>CEO</sub>	50	—	—	V	I <sub>C</sub> = 1mA
Emitter-Base Breakdown Voltage		BV <sub>EBO</sub>	5	—	—	V	I <sub>E</sub> = 720μA, DDTC114GCA I <sub>E</sub> = 330μA, DDTC124GCA I <sub>E</sub> = 160μA, DDTC144GCA I <sub>E</sub> = 72μA, DDTC115GCA
Collector Cutoff Current		I <sub>CBO</sub>	—	—	0.5	μA	V <sub>CB</sub> = 50V
Emitter Cutoff Current	DDTC114GCA DDTC124GCA DDTC144GCA DDTC115GCA	I <sub>EBO</sub>	300 140 65 30	—	580 260 130 58	μA	V <sub>EB</sub> = 4V
Collector-Emitter Saturation Voltage		V <sub>CE(sat)</sub>	—	—	0.3	V	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0.5mA
DC Current Transfer Ratio	DDTC114GCA DDTC124GCA DDTC144GCA DDTC115GCA	h <sub>FE</sub>	30 56 68 82	—	—	—	I <sub>C</sub> = 5mA, V <sub>CE</sub> = 5V
Bleeder Resistor (R <sub>2</sub> ) Tolerance		ΔR <sub>2</sub>	-30	—	+30	%	—
Gain-Bandwidth Product*		f <sub>T</sub>	—	250	—	MHz	V <sub>CE</sub> = 10V, I <sub>E</sub> = -5mA, f = 100MHz

\* Transistor - For Reference Only

# Typical Curves – DDTC114GCA



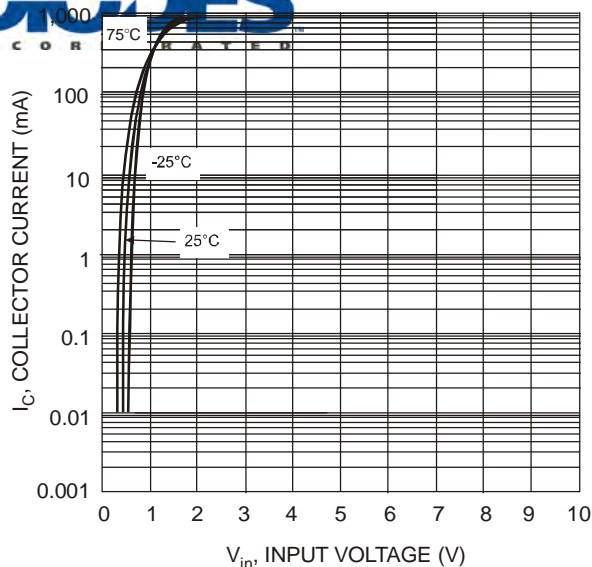


Fig. 5 Collector Current vs. Input Voltage

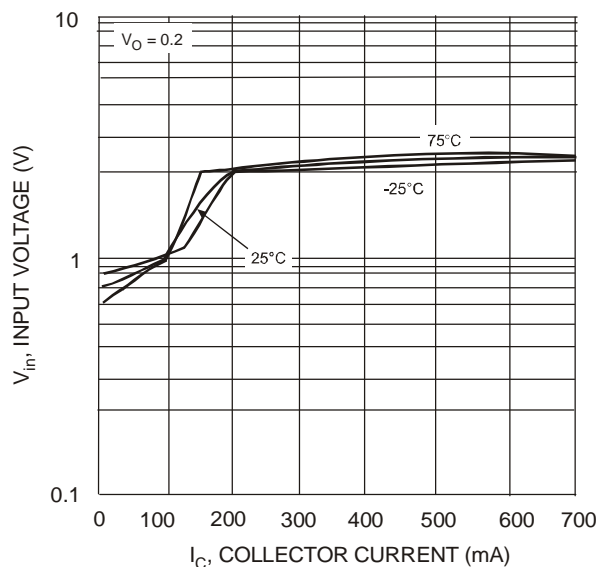


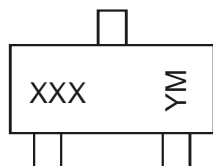
Fig. 6 Input Voltage vs. Collector Current

## Ordering Information (Note 4)

Device	Packaging	Shipping
DDTC114GCA-7-F	SOT-23	3000/Tape & Reel
DDTC124GCA-7-F	SOT-23	3000/Tape & Reel
DDTC144GCA-7-F	SOT-23	3000/Tape & Reel
DDTC115GCA-7-F	SOT-23	3000/Tape & Reel

Notes: 4. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

## Marking Information



XXX = Product Type Marking Code, See Table on Page 1  
 YM = Date Code Marking  
 Y = Year ex: T = 2006  
 M = Month ex: 9 = September

### Date Code Key

Year	2006	2007	2008	2009	2010	2011	2012
Code	T	U	V	W	X	Y	Z

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

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