

Electrical Characteristics @ 25°C Unless Otherwise Specified
DTR1 NPN

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(off)}$	0.5	---	---	V	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(on)}$	---	---	1.1	V	$V_O=0.3V, I_O=5mA$
Output Voltage	$V_{O(on)}$	---	0.1	0.3	V	$I_O=5mA, I_I=0.25mA$
Input Current	I_I	---	---	3.6	mA	$V_I=5V$
Output Current	$I_{O(off)}$	---	---	0.5	μA	$V_{CC}=50V, V_I=0$
DC Current Gain	G_I	80	---	---		$V_O=5V, I_O=10mA$
Input Resistance	R_I	1.54	2.2	2.86	K Ω	
Resistance Ratio	R_2/R_1	17	21	26		
Transition Frequency	f_T	---	250	---	MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$

DTR2 PNP

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(off)}$	-0.5	---	---	V	$V_{CC}=-5V, I_O=-100\mu A$
	$V_{I(on)}$	---	---	-1.1	V	$V_O=-0.3V, I_O=-5mA$
Output Voltage	$V_{O(on)}$	---	---	-0.3	V	$I_O=-5mA, I_I=-0.25mA$
Input Current	I_I	---	---	-3.6	mA	$V_I=-5V$
Output Current	$I_{O(off)}$	---	---	-0.5	μA	$V_{CC}=-50V, V_I=0$
DC Current Gain	G_I	80	---	---		$V_O=-5V, I_O=-10mA$
Input Resistance	R_I	1.54	2.2	2.86	K Ω	
Resistance Ratio	R_2/R_1	17	21	26		
Transition Frequency	f_T	---	250	---	MHz	$V_{CE}=-10V, I_E=5mA, f=100MHz$

Curve Characteristics

Fig. 1 - DTR1 DC Current Gain Characteristics

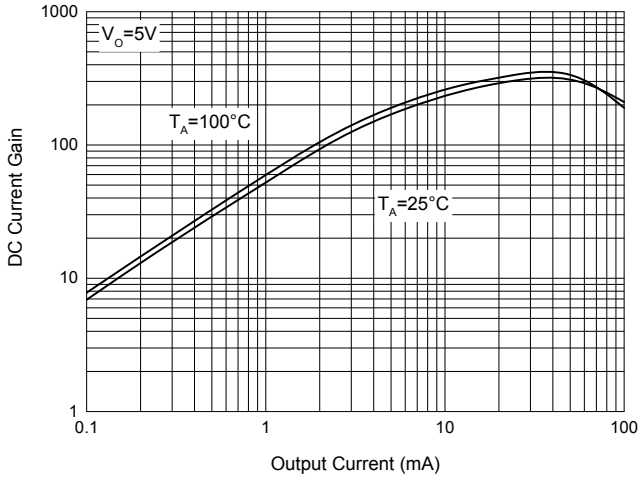


Fig. 2 - DTR1 Input Voltage (on) Characteristics

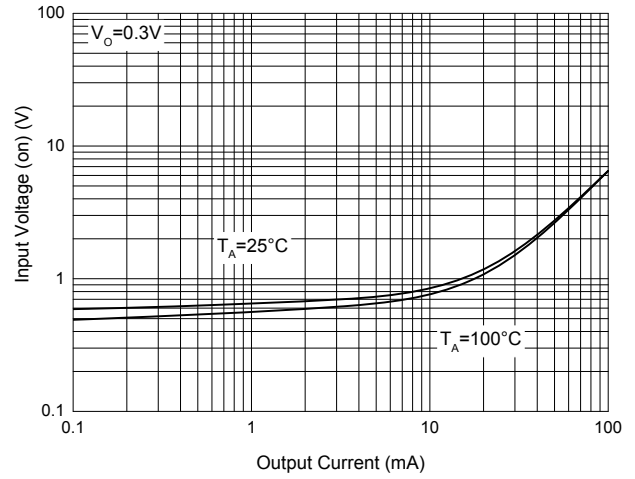


Fig. 3 - DTR1 Input Voltage (off) Characteristics

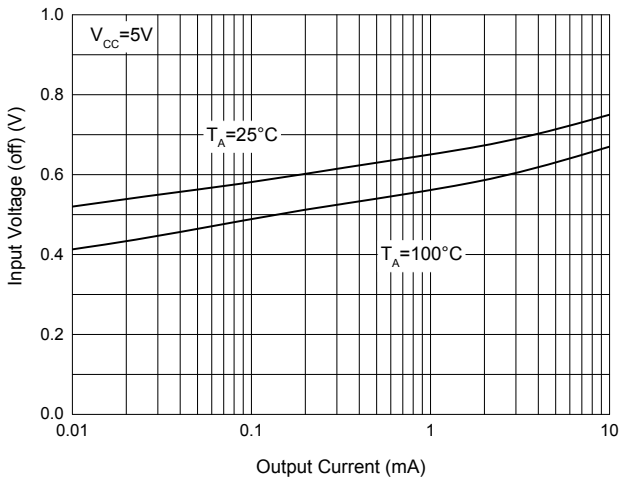


Fig. 4 - DTR1 Output Voltage Characteristics

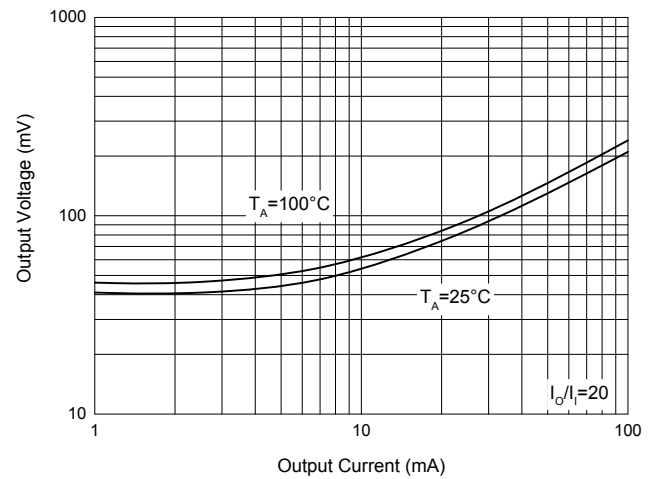


Fig. 5 - DTR2 DC Current Gain Characteristics

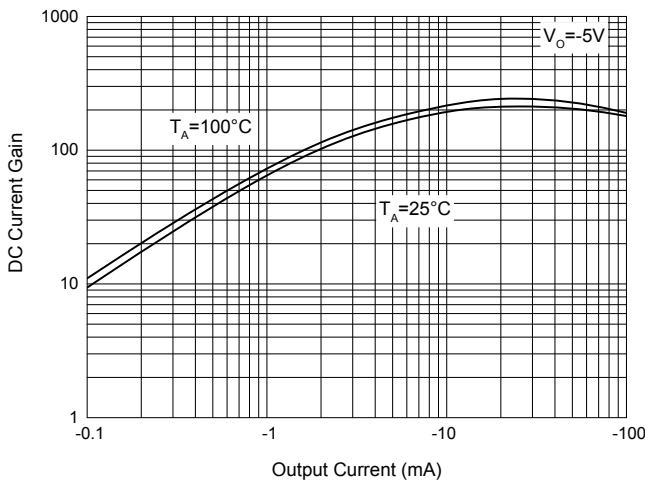
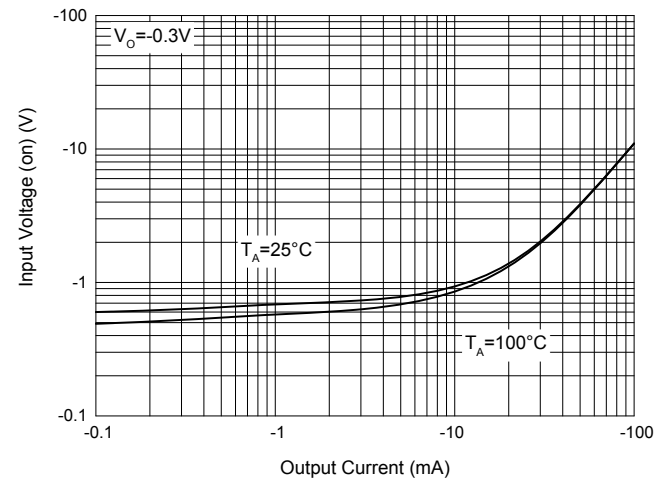


Fig. 6 - DTR2 Input Voltage (on) Characteristics



Curve Characteristics

Fig. 7 - DTR2 Input Voltage (off) Characteristics

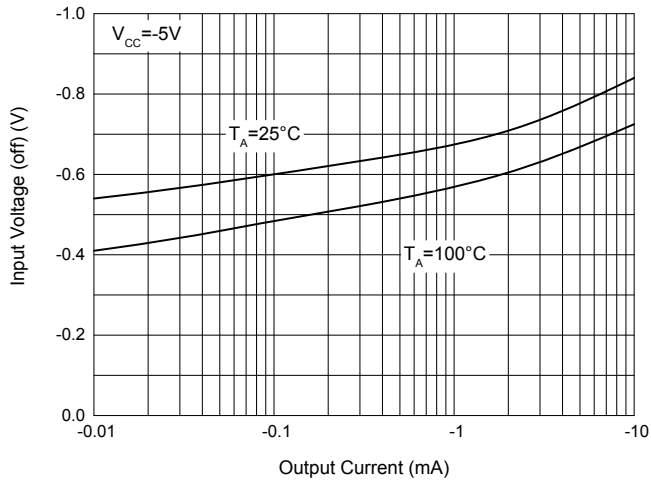


Fig. 8 - DTR2 Output Voltage Characteristics

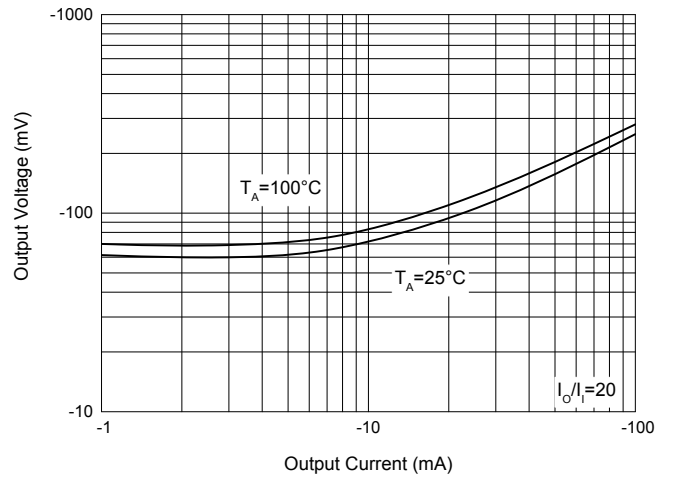
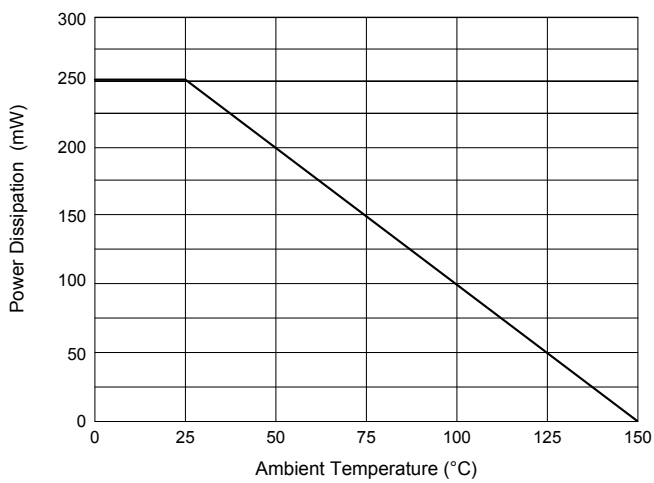


Fig. 9 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

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