



Digital Transistors (Built-in Resistors)

Features



UMD18N

Maximum Ratings (Ta=25 Unless otherwise specified)

DTR1-NPN

	SYMBOL		CONDITI 1	LUê M	VALUE
Supply Voltage	V _{CC}	V			50
Input Voltage	V _{IN}	V			-7 to +20
Output Current	I _O	mA			100
Power Dissipation	P _D	mW			150
Junction Temperature Single	T _J				150
Storage Temperature	T _{STG}				-55 to +150

DTR2-PNP

ITEM



UMD18N

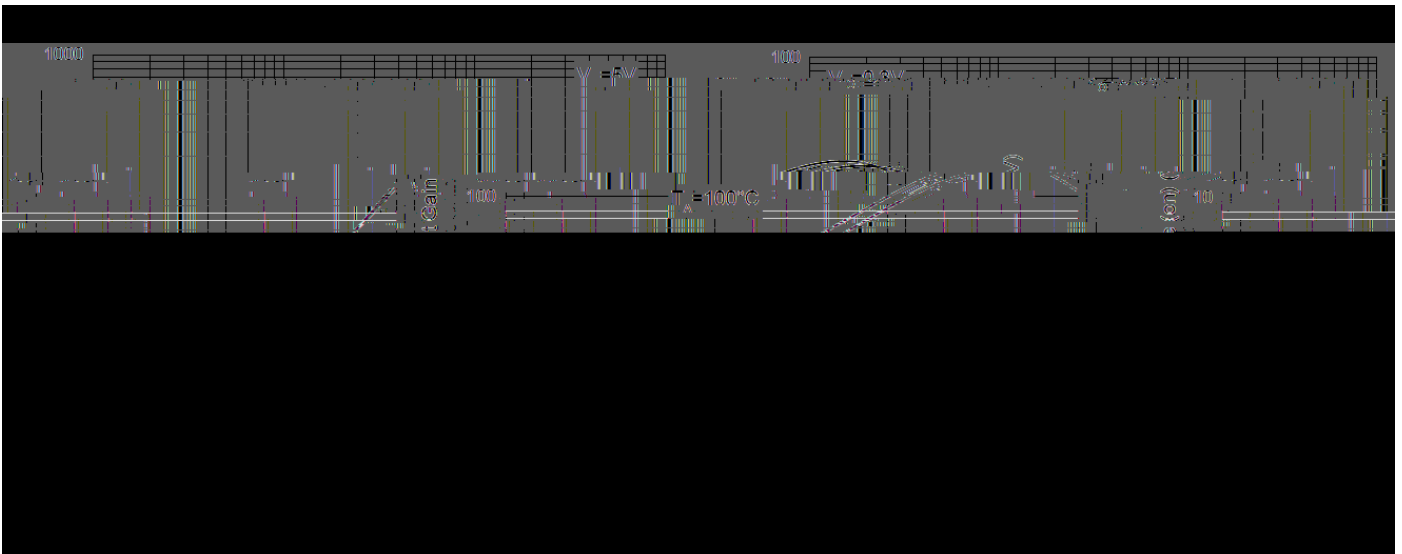
DTR2-PNP

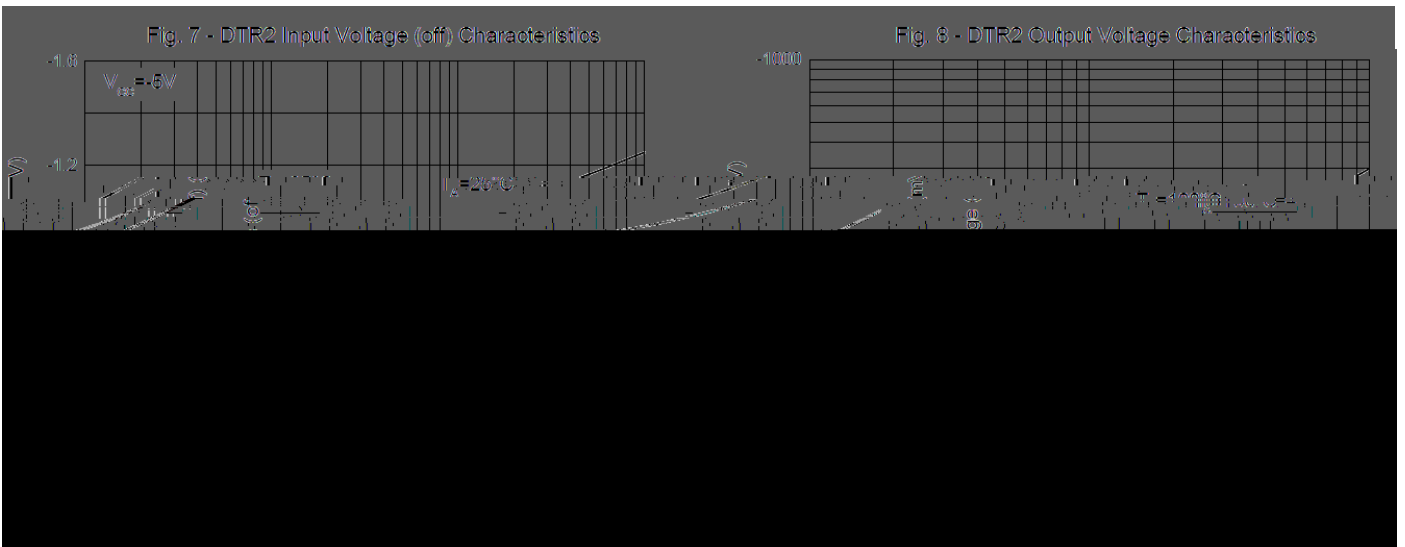
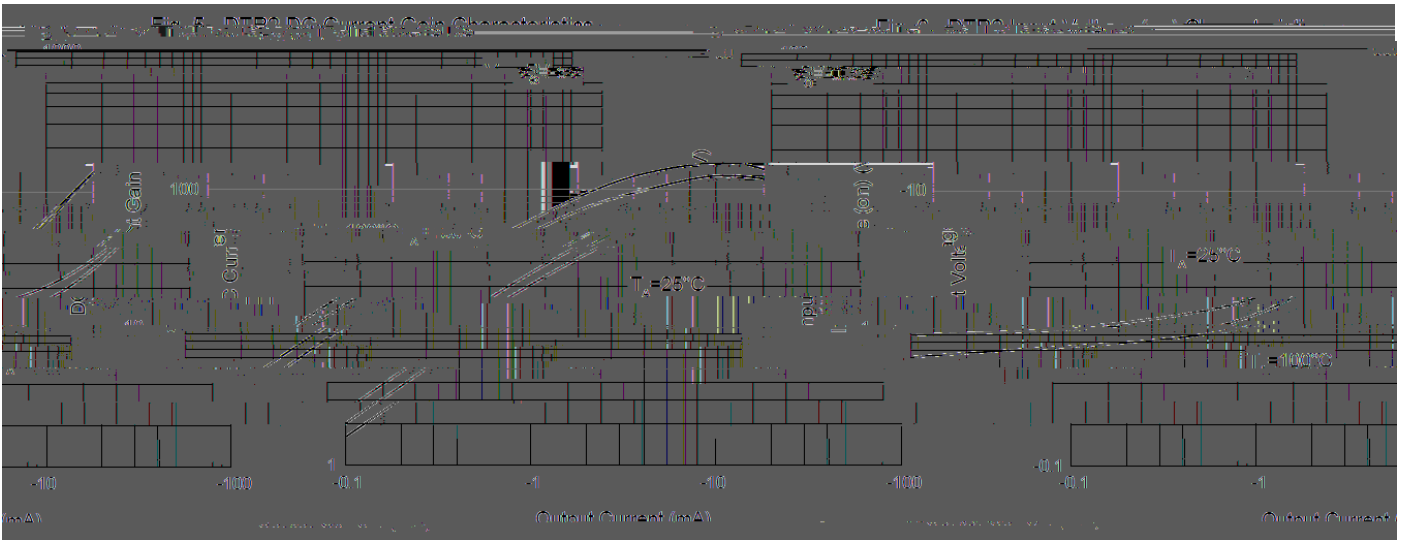
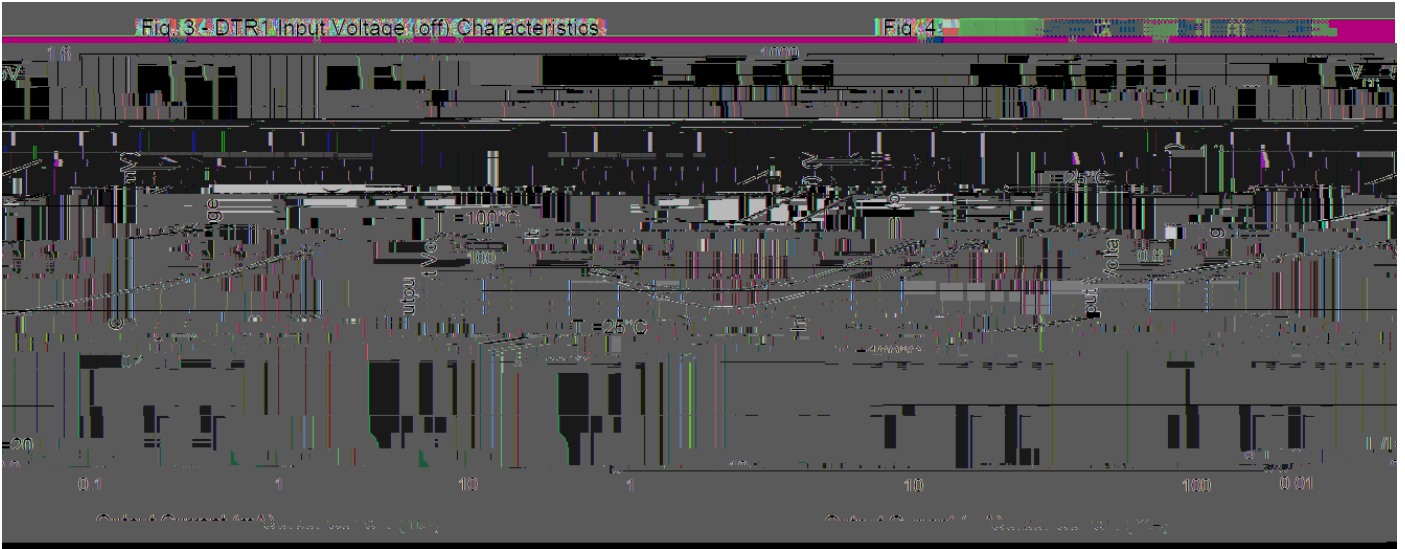
ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	$V_{I(off)}$	V	$V_{CC}=-5V, I_c=-100\mu A$	-0.3		
	$V_{I(on)}$	V	$V_O=-0.3V, I_c=-20mA$			-2.5
Output voltage	$V_{O(on)}$	V	$I_o / I_i = -10mA / -0.5 mA$			-0.3
Input current	I_i	mA	$V_i=-5V$			-1.8
Output current	$I_{O(off)}$	μA	$V_{CC}=-50V, V_i=0$			-0.5
DC current gain	G_i		$V_o=-5V, I_o = -10mA$	30		
Input resistance	R_i	k		3.29	4.7	6.11
Resistance ratio	R_2/R_1			1.7	2.1	2.6
Transition frequency	f_T	MHz	$V_{CE}=-10V, I_E=-5mA, f=100MHz$		250	

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
UMD18N	F2	Approximate 0.009g	3000	30000	120000	7" reel

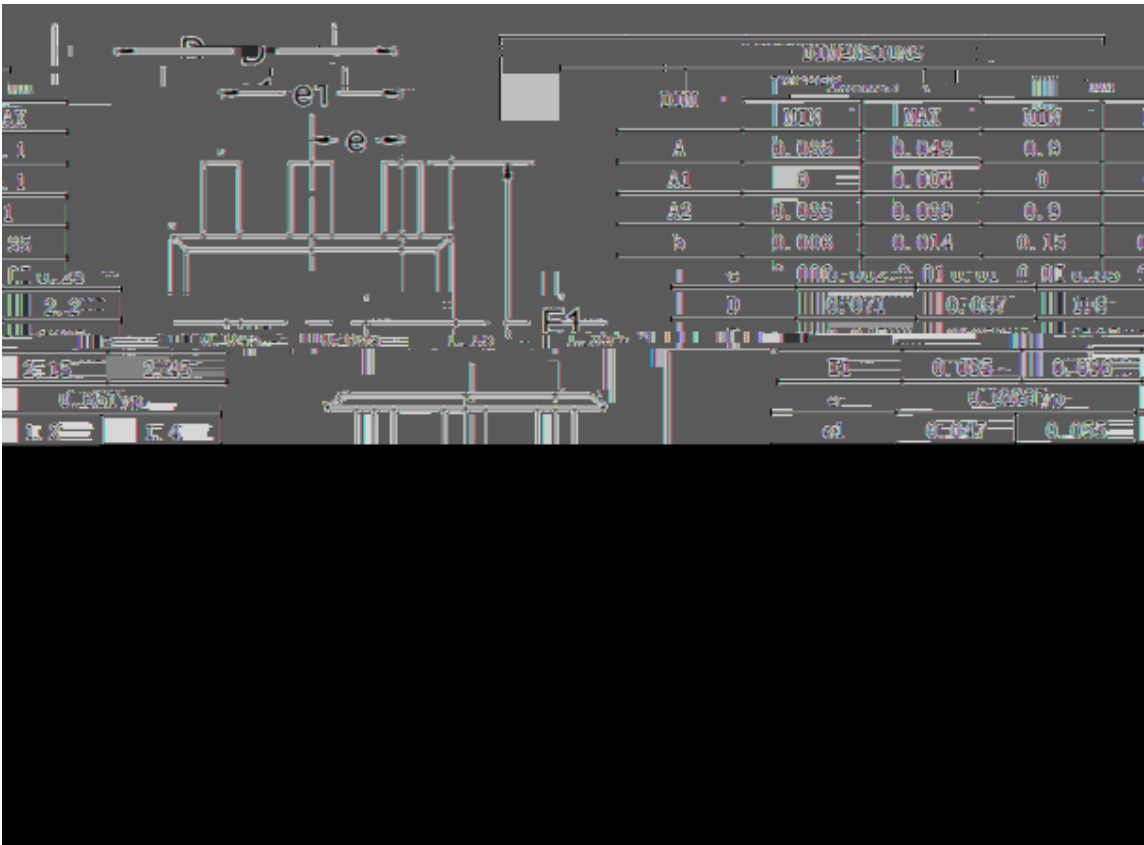
Characteristics (Typical)



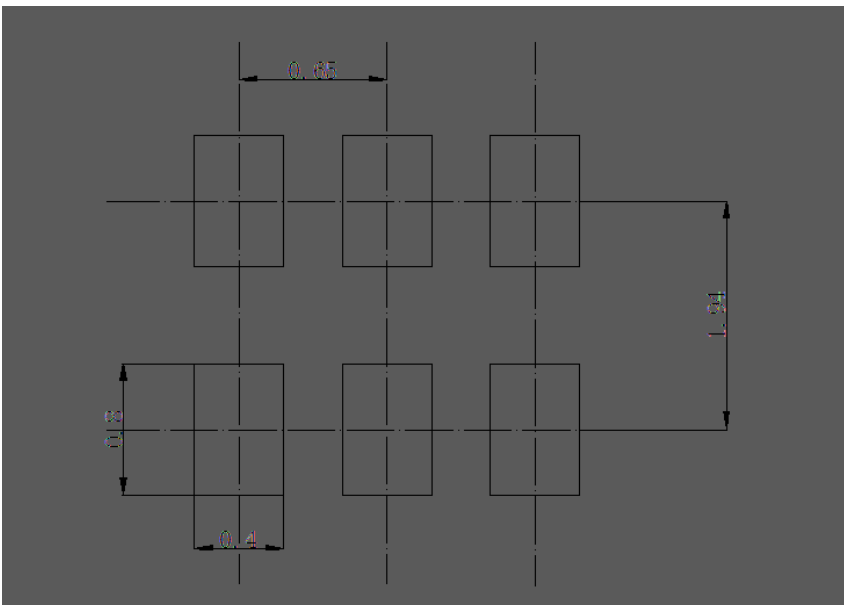




SOT-363 Package Outline Dimensions



SOT-363 Suggested Pad Layout



Unit mm



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, products, services or information. Yangjie does not assume any responsibility for the use of the product in any application where the product is used in a manner not intended by Yangjie.