

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth

CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

DTA143ZCA

Features

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- The bias resistors consist of thin-film resistors with complete isolation to allow negative biasing of the input. They also have the advantage of almost completely eliminating parasitic effects.
- Only the on/off conditions need to be set for operation, making device design easy

Absolute maximum ratings @ 25° C

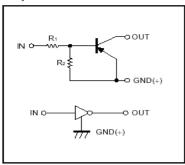
Symbol	Parameter	Min	Тур	Max	Unit
V_{cc}	Supply voltage		-50		V
V_{IN}	Input voltage	-30		5.0	V
I _O I _{C(MAX)}	Output current		-100 -100		mA
P_d	Power dissipation		200		mW
Tj	Junction temperature		150		$^{\circ}$
T_{stg}	Storage temperature	-55		150	$^{\circ}\mathbb{C}$

 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Electrical Characteristics @ 25°C

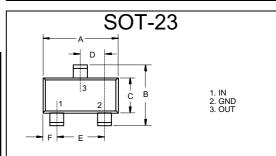
Symbol	Parameter		Тур	Max	Unit
$V_{I(off)}$	Input voltage (V _{CC} =-5V, I _O =-100 μ A)			-0.5	V
$V_{I(on)}$	$(V_0=-0.3V, I_0=-5mA)$	-1.3			V
$V_{O(on)}$	Output voltage (I _O /I _I =-5mA/-0.25mA			-0.3	V
l _l	Input current (V _I =-5V)			-1.8	mA
I _{O(off)}	Output current (V _{CC} =-50V, V _I =0)			-0.5	μА
Gı	DC current gain (V _O =-5V, I _O =-10mA)	80			
R ₁	Input resistance	3.29	4.7	6.11	$\mathbf{K} \Omega$
R ₂ /R ₁	Resistance ratio	8.0	10	12	
f _T	Transition frequency (V _{CE} =-10V, I _E =5mA, f=100MHz)		250		MHz

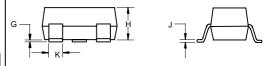
● Equivalent circuit



*Marking: E13

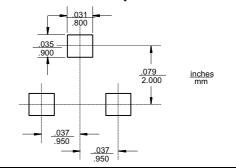
PNP Digital Transistors





DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.110	.120	2.80	3.04		
В	.083	.098	2.10	2.64		
С	.047	.055	1.20	1.40		
D	.035	.041	.89	1.03		
Е	.070	.081	1.78	2.05		
F	.018	.024	.45	.60		
G	.0005	.0039	.013	.100		
Н	.035	.044	.89	1.12		
J	.003	.007	.085	.180		
K	015	020	37	51		

Suggested Solder Pad Layout



DTA143ZCA



Electrical characteristic curves

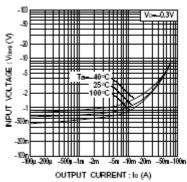


Fig.1 Input voltage vs. output current (ON characteristics)

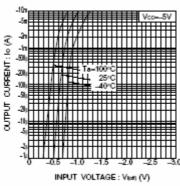


Fig.2 Output current vs. input voltage (OFF characteristics)

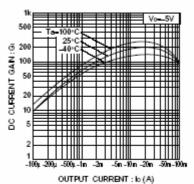


Fig.3 DC current gain vs. output current

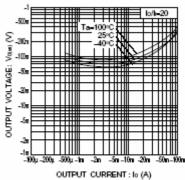


Fig.4 Output voltage vs. output current



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.
Micro Commercial Components Corp. 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 Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.