

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Micro Commercial Components \(MCC\)](#)  
[DTA114TKA-TP](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

**M.C.C.**

Micro Commercial Components

Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

# DTA114TKA

## Features

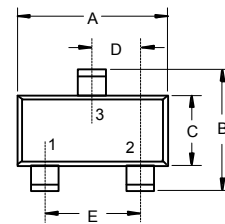
- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit)
- The bias resistors consist of thin-film resistors with complete isolation to allow negative biasing of the input. They also have the advantage of almost completely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

## Absolute Maximum Ratings

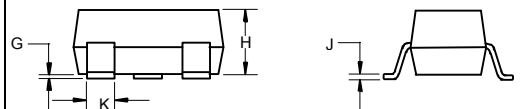
Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base voltage	$V_{EBO}$	-5	V
Collector Current-Continuous	$I_C$	-100	mA
Collector Dissipation	$P_C$	200	mW
Junction Temperature Range	$T_J$	-55~150	°C
Storage Temperature Range	$T_{STG}$	-55~150	°C

## PNP Digital Transistor

### SOT-23-3L

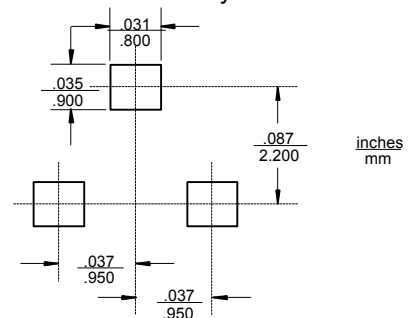


1. Base  
2. Emitter  
3. Collector



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.113	.117	2.87	2.97	
B	.108	.112	2.75	2.85	
C	.061	.065	1.55	1.65	
D	.036	.038	.925	.975	
E	.073	.077	1.85	1.95	
G	.0016	.0039	.04	.100	
H	.044	.049	1.12	1.25	
J	.006	.007	.14	.17	
K	.013	.015	.34	.37	

### Suggested Solder Pad Layout



## Electrical Characteristics

Sym	Parameter	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C = -50\mu A, I_E = 0$ )	-50	---	---	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C = -1mA, I_B = 0$ )	-50	---	---	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E = -50\mu A, I_C = 0$ )	-5	---	---	V
$I_{CBO}$	Collector Cut-off Current ( $V_{CB} = -50V, I_E = 0$ )	---	---	-0.5	uA
$I_{EBO}$	Emitter Cut-off Current ( $V_{EB} = -4V, I_C = 0$ )	---	---	-0.5	uA
$h_{FE}$	DC Current Gain ( $V_{CE} = -5V, I_C = -1mA$ )	100	250	600	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C = -10mA, I_B = -1mA$ )	---	---	-0.3	V
$R_1$	Input Resistor	7	10	13	KΩ
$f_T$	Transition Frequency ( $V_{CE} = -10V, I_C = -5mA, f = 100MHz$ )	---	250	---	MHz

# DTA114TKA



Micro Commercial Components

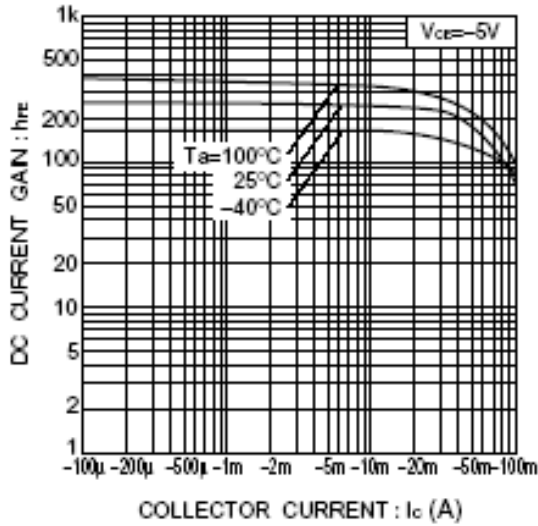


Fig.1 DC current gain vs. collector current

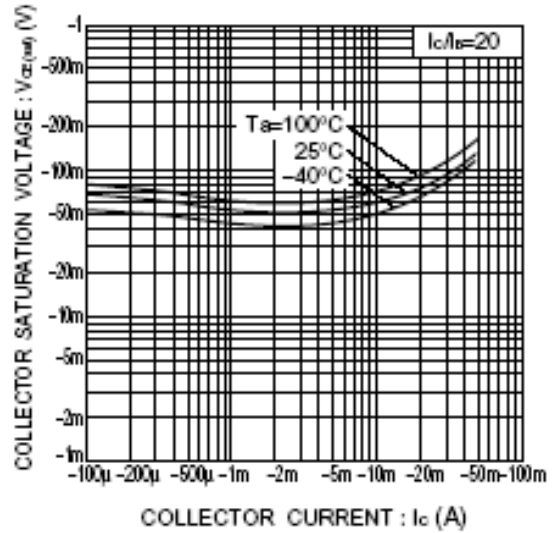


Fig.2 Collector-emitter saturation voltage vs. collector current

●Equivalent circuit

