



Micro Commercial Components

## Micro Commercial Components Corp.

### Products End of Life Notification

Issue date: Apr-1st-2008

EOL No. #:040108

Last Buy Date :N/A

Description and Purpose:

MCC has undergone a review of its core business and products , and determined to discontinue below products:

Discontinued Devices	Possible Replacements
DTA114EKA	DTA114ECA
DTA114TKA	DTA114TCA
DTA114YKA	DTA114YCA
DTA123JKA	DTA123JCA
DTA123YKA	DTA123YCA
DTA124EKA	DTA124ECA
DTA143EKA	DTA143ECA
DTA143TKA	DTA143TCA
DTA143XKA	DTA143XCA
DTA143ZKA	DTA143ZCA
DTA144EKA	DAT144ECA
DTA144TKA	DTA144TCA
DTC113ZKA	DTC113ZCA
DTC114EKA	DTC114ECA
DTC114TKA	DTC114TCA
DTC114WKA	DTC114WCA
DTC114YKA	DTC114YCA
DTC123JKA	DTC123JCA
DTC123YKA	DTC123YCA
DTC124EKA	DTC124ECA
DTC143EKA	DTC143ECA
DTC143TKA	DTC143TCA
DTC143XKA	DTC143XCA
DTC143ZKA	DTC143ZCA
DTC144EKA	DTC144ECA
DTC144TKA	DTC144TCA



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# DTC114YKA

## NPN Digital Transistors

### 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

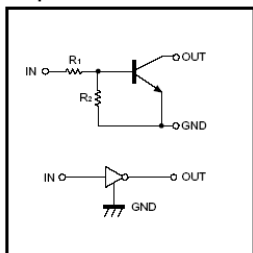
### Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
$V_{CC}$	Supply voltage	---	50	---	V
$V_{IN}$	Input voltage	-6	---	40	V
$I_o$	Output current	---	70	---	mA
$I_{C(MAX)}$		---	100	---	
$P_d$	Power dissipation	---	200	---	mW
$T_j$	Junction temperature	---	150	---	°C
$T_{stg}$	Storage temperature	-55	---	150	°C

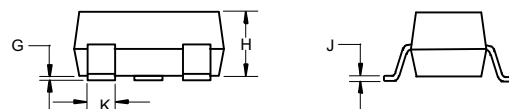
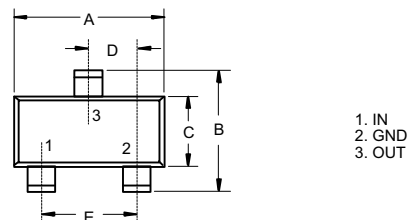
### Electrical Characteristics @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
$V_{I(off)}$	Input voltage ( $V_{CC}=5V, I_o=100 \mu A$ )	---	---	0.3	V
$V_{I(on)}$	( $V_o=0.3V, I_o=1mA$ )	1.4	---	---	V
$V_{O(on)}$	Output voltage ( $I_o/I_i=5mA/0.25mA$ )	---	0.1	0.3	V
$I_i$	Input current ( $V_i=5V$ )	---	---	0.88	mA
$I_{O(off)}$	Output current ( $V_{CC}=50V, V_i=0$ )	---	---	0.5	$\mu A$
$G_I$	DC current gain ( $V_o=5V, I_o=5mA$ )	68	---	---	
$R_1$	Input resistance	7.0	10	13	K $\Omega$
$R_2/R_1$	Resistance ratio	3.7	4.7	5.7	
$f_T$	Transition frequency ( $V_{CE}=10V, I_E=5mA, f=100MHz$ )	---	250	---	MHz

#### Equivalent circuit

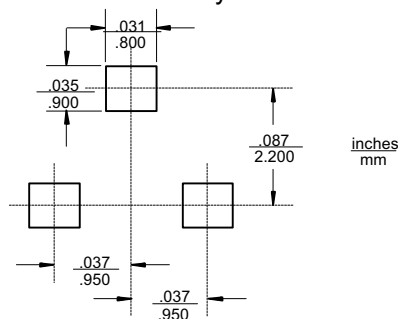


### SOT-23-3L



DIM	INCHES		MM		NOTE
	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





TM

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