

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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DTA114TE

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- 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

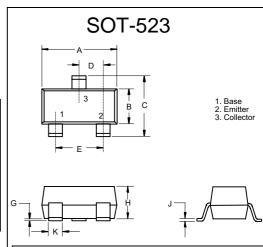
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Parameter	Symbol	Value	Unit		
Collector-Base Voltage	V_{CBO}	-50	V		
Collector-Emitter Voltage	V_{CEO}	-50	V		
Emitter-Base voltage	V_{EBO}	-5	V		
Collector Current-Continuous	I _C	-100	mA		
Collector Dissipation	Pc	150	mW		
Junction Temperature Range	TJ	-55~150	$^{\circ}\mathbb{C}$		
Storage Temperature Range	T _{STG}	-55~150	$^{\circ}\mathbb{C}$		

Electrical Characteristics

Sym	Parameter	Min	Тур	Max	Unit
V _{(BR)CBO}	Collector-Base Breakdown Voltage (I _C =-50uA, 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 =-50uA, I _C =0)				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	
$V_{\text{CE(sat)}}$	Collector-Emitter Saturation Voltage (I _C =-10mA, I _B =-1mA)			-0.3	V
R ₁	Input Resistor	7	10	13	ΚΩ
f_{T}	Transition Frequency (V _{CE} =-10V, I _C =-5mA, f=100MHz)		250		MHz

^{*}Marking: 94

PNP Digital Transistor



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.059	.067	1.50	1.70	
В	.030	.033	0.75	0.85	
O	.057	.069	1.45	1.75	
О	.020 No	ominal	0.50Nom	inal	
Е	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
Η	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

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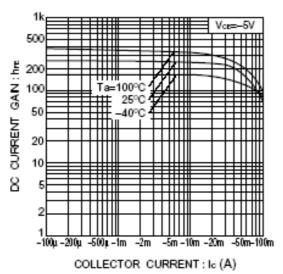


Fig.1 DC current gain vs. collector current

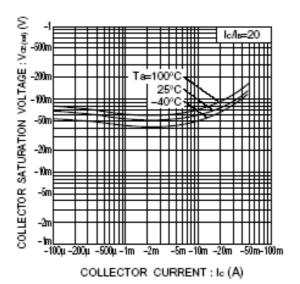
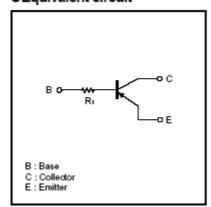


Fig.2 Collector-emitter saturation voltage vs. collector current

●Equivalent circuit





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Ordering Information:

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

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