



Micro Commercial Components



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DTC114EE

Digital Transistors

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epitaxial Planar Die Construction
- Untrl Small Surface Mount Package
- Built-In Biasing Resistors
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:24

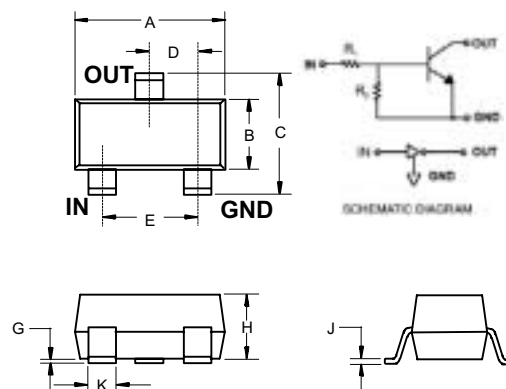
Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
V_{CC}	Supply Voltage	---	50	---	V
I_C	Collector current	---	50	100	mA
V_{IN}	Input voltage	-10	---	40	V
P_d	Power dissipation	---	150	---	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 ($V_{CC}=5V$, $I_O=100\mu A$)	---	---	0.5	V
$V_{I(on)}$	($V_O=0.3V$, $I_O=10mA$)	3.0	---	---	V
$V_{O(on)}$	Output voltage ($I_O=10mA$, $I_i=0.5mA$)	---	---	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	μA
G_i	DC current gain ($V_O=5V$, $I_O=5mA$)	30	---	---	
R_i	Input resistance	7	10	13	$K\Omega$
R_2/R_1	Resistance ratio	0.8	1.0	0.2	
f_T	Transition frequency ($V_{CE}=10V$, $I_E=5mA$, $f=100MHz$)	---	250	---	MHz

SOT-523



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

Ordering Information :

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

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