



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
- Halogen free available upon request by adding suffix "-HF"

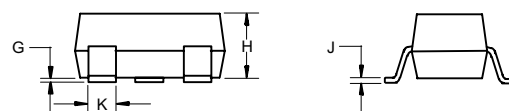
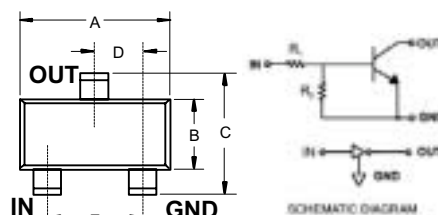
Absolute maximum ratings @ 25°C

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 μA)	---	---	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 ₁	Input resistance	7	10	13	K _Ω
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



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	



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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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