

NPN Digital Transistor

DTC113ZUA

Features

- **Pb-Free package is available**
RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Epitaxial Planar Die Construction
- Complementary NPN Types Available
- Built-In Biasing Resistors
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: E21

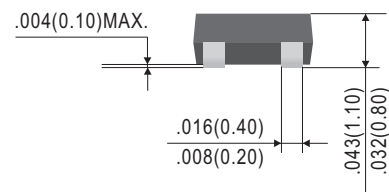
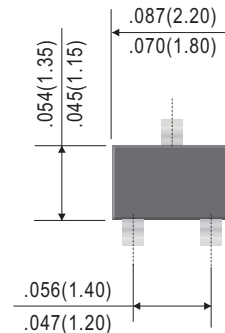
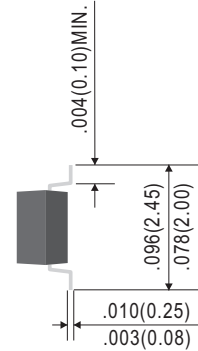
Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
I_C	Collector current	---	100	---	mA
V_{IN}	Input voltage	-5	---	+10	V
P_d	Power dissipation	---	200	---	mW
T_J	Junction temperature	---	150	---	°C
T_{stg}	Storage temperature	-55	---	150	°C

Electrical Characteristics @ 25°C

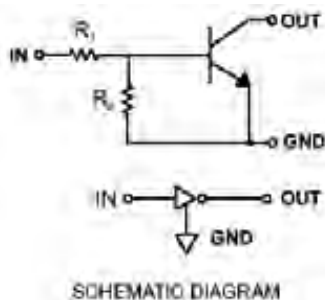
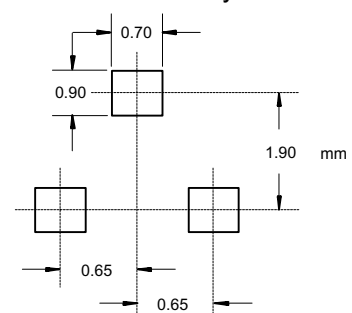
Symbol	Parameter	Min	Typ	Max	Unit
$V_{I(off)}$	Input voltage ($V_{CC}=5V, I_o=100 \mu A$) ($V_o=0.3V, I_o=20mA$)	0.3	---	---	V
$V_{I(on)}$		---	---	3.0	V
$V_{O(on)}$	Output voltage ($I_o=10mA, I_i=0.5mA$)	---	---	0.3	V
I_i	Input current ($V_i=5V$)	---	---	7.2	mA
$I_{O(off)}$	Output current ($V_{CC}=50V, V_i=0$)	---	---	0.5	μA
G_I	DC current gain ($V_o=5V, I_o=5mA$)	33	---	---	
R_1	Input resistance	0.7	1.0	1.3	K Ω
R_2/R_1	Resistance ratio	8	10	12	
f_T	Transition frequency ($V_o=10V, I_o=5mA, f=100MHz$)	---	250	---	MHz

SOT-323



Dimensions in inches and (millimeters)

Suggested Solder Pad Layout





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Typical Characteristics

