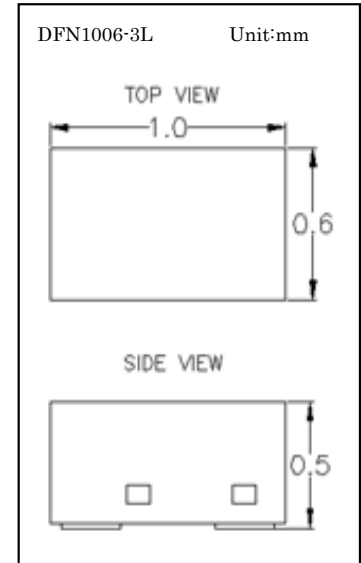
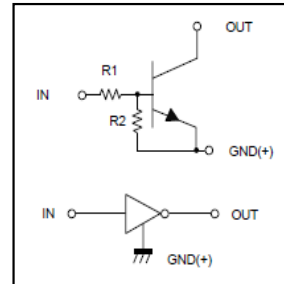


Digital Transistor

- ◇ Epitaxial planar die construction
- ◇ Operating and Storage Junction Temperatures: -55°C to 150°C
- ◇ RoHS compliant / Green EMC
- ◇ Built-In Biasing Resistors

Device	Marking
DTC144D2	N6

Equivalent Circuit



Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
V_{CC}	Supply Voltage	50	V
V_{IN}	Input Voltage	-10~+40	V
I_O	Output Current	100	mA
P_D	Power Dissipation	250	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V_{CEO}	Collector- Emitter Breakdown Voltage	$I_C=1mA, I_B=0$	50			V
V_{CBO}	Collector- Base Breakdown Voltage	$I_C=50\mu A, I_E=0$	50			V
I_{CBO}	Collector Cutoff Current	$V_{CB}=50V, I_E=0$			0.5	uA
$V_{I(off)}$	Input Voltage	$V_{CC}=5V, I_O=100\mu A$	0.5	1.2		V
$V_{I(on)}$		$V_O=0.3V, I_O=2mA$		1.6	3	V
$V_{O(on)}$	Output Voltage	$I_O/I_I=10mA/0.5mA$			0.3	V
I_I	Input Current	$V_I=5V$			0.18	mA
$I_{O(off)}$	Output Current	$V_{CC}=50V, V_I=0$			0.5	uA
G_I	DC Current Gain	$V_O=5V, I_O=5mA$	68			
R_1	Input Resistance		32.9	47	6.11	kΩ
R_2/R_1	Resistance Ratio		0.8	1	1.2	
f_T	Transition Frequency	$V_{CE}=10V, I_E=5mA, f=100MHz$		250		MHz

Digital Transistor

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
DTC144D2	DFN1006-3L	Tape & Reel 10000pcs / 7" Reel	8mm	4mm	Conductive	

Package Dimensions

