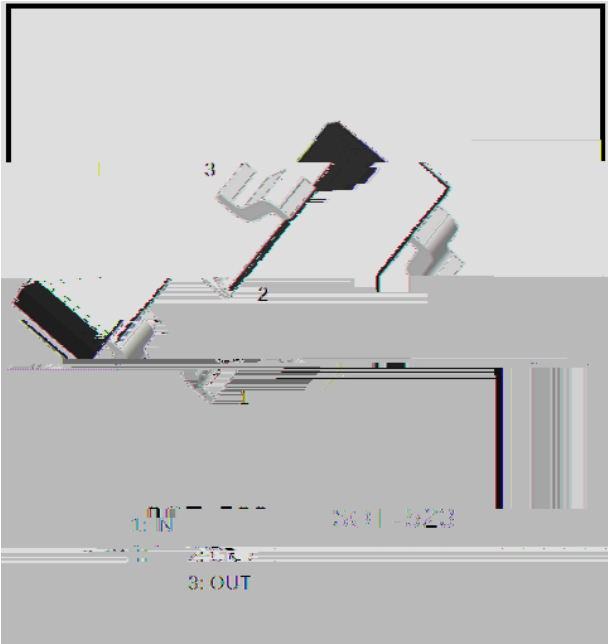


## NPN Digital Transistors (Built-in Resistors)



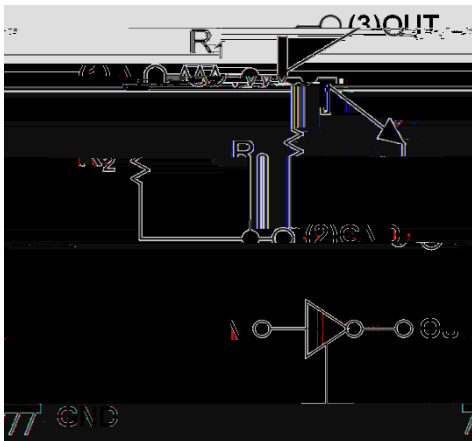
### Features

- Moisture Sensitivity Level 1
- Surface mount package ideally Suited for Automatic

### Mechanical Data

- Package:** SOT-523
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:** 26

### Equivalent circuit



### Maxima- Unless otherwise specified

IM				
Supply Voltage	V <sub>CC</sub>	V		50
	I <sub>O</sub>	mA		100
Power Dissipation	P <sub>D</sub>	mW		150
Junction Temperature	T <sub>J</sub>			150
Storage Temperature	T <sub>STG</sub>			-55 to +150



# DTC144EE

## Electrical Characteristics (Ta=25 unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	$V_{I(off)}$	V	$V_{CC}=5V, I_C=100\mu A$	0.5		
	$V_{I(on)}$	V	$V_O=0.3V, I_C=2mA$			3
Output voltage	$V_{O(on)}$	V	$I_O / I_I = 10mA / 0.5 mA$			0.3
Input current	$I_I$	mA	$V_I=5V$			0.18
Output current	$I_{O(off)}$	$\mu A$	$V_{CC}=50V, V_I=0$			0.5
DC current gain	$G_I$		$V_O=5V, I_O = 5mA$	68		
Input resistance	$R_I$	k		32.9	47	61.1
Resistance ratio	$R_2/R_1$			0.8	1	1.2
Transition frequency	$f_T$	MHz	$V_O=10V, I_O=-5mA$		250	

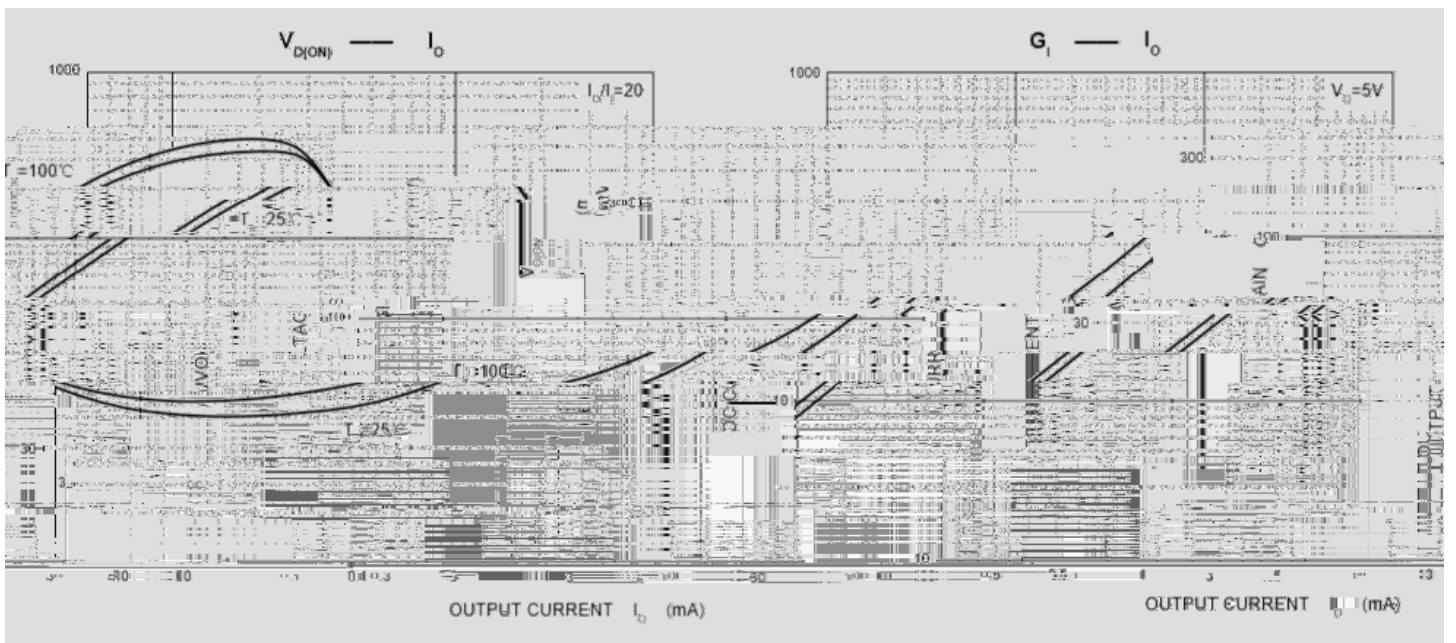
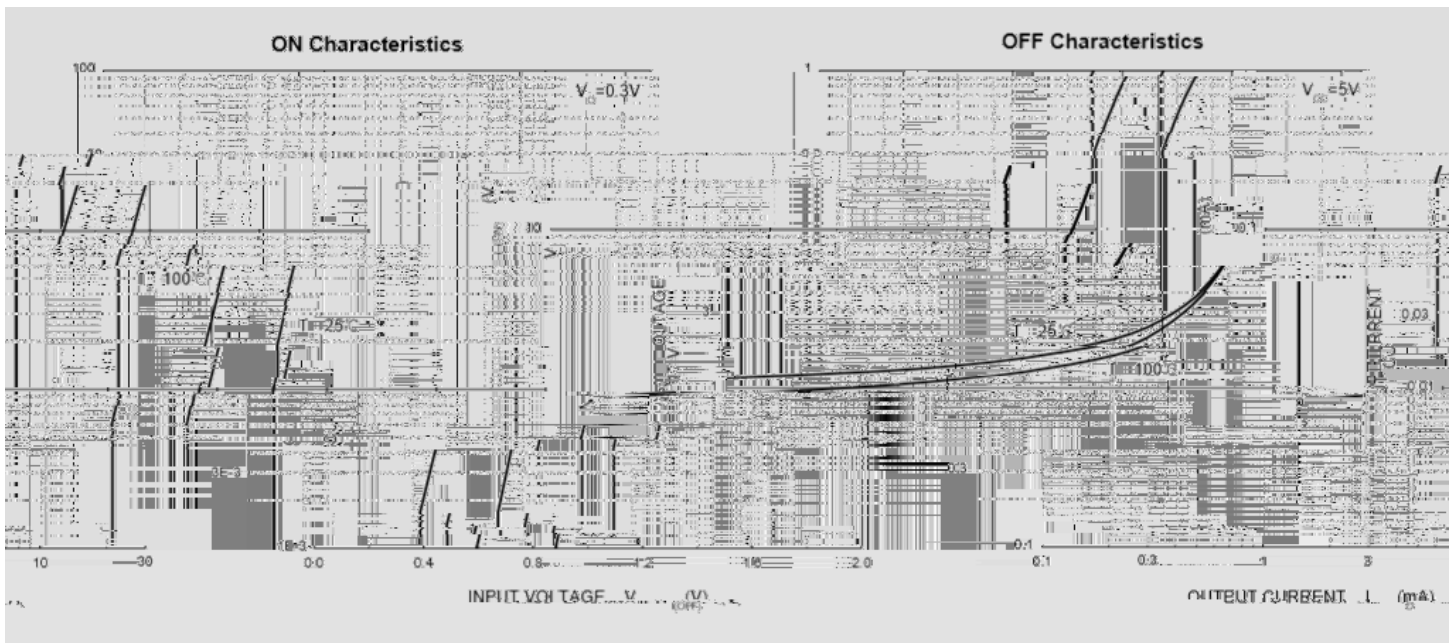
## Ordering Information (Example)

Preferred P/N	Packing code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
DTC144EE	F2	Approximate 0.0027	3000	30000	120000	7" reel



# DTC144EE

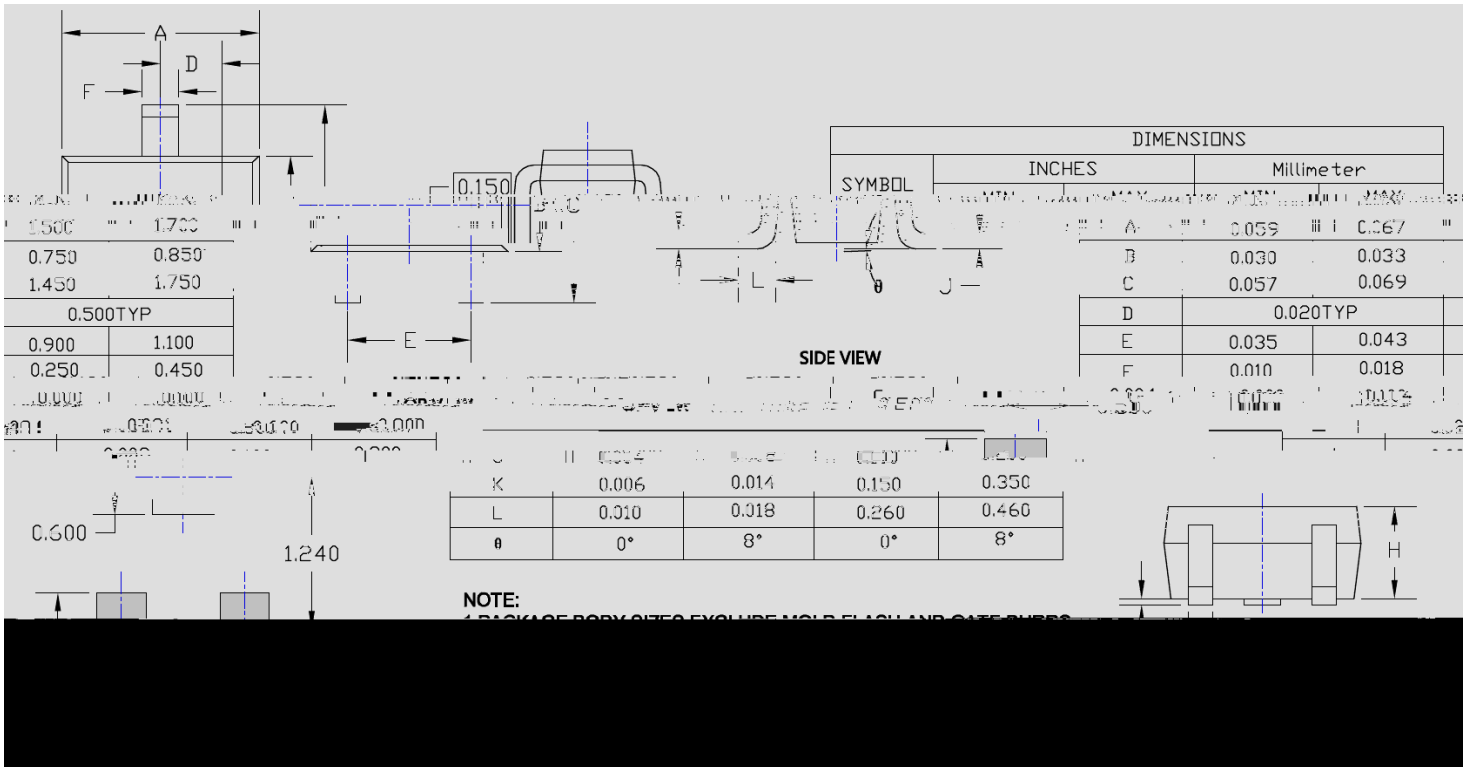
## Characteristics (Typical)





# DTC144EE

## SOT-523 Package Outline Dimensions



Note:

1. All dimensions are in millimeters (mm) unless otherwise specified.



## Disclaimer

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