



NPN Digital Transistors (Built-in Resistors)

Features

- Moisture Sensitivity Level 1
- I_S I_{SI} y_{liS} $r_{s\psi}$ r_{oratu} 1

Mechanical Data

- **Package:** SOT-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** E42



DTC123JE

■ Electrical Characteristics (Ta=25 unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Input voltage	$V_{I(off)}$	V	$V_{CC}=5V, I_o=100\mu A$ $V_o=0.3V, I_o=5mA$	0.5	-	-
	$V_{I(on)}$	V		-	-	1.1
Output voltage	$V_{O(on)}$	V	$I_o/I_i=5mA/0.25mA$	-	-	0.3
Input current	I_I	mA	$V_I=5V$	-	-	3.6
Output current	$I_{O(off)}$	μA	$V_{CC}=50V, V_i=0$	-	-	0.5
DC current gain	G_I		$V_o=5V, I_o=10mA$	80	-	-
Input resistance	R_1	k Ω		1.54	2.2	2.86
Resistance ratio	R_2/R_1			17	21	26
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
DTC123JE	F2	Approximate 0.0027	3000	30000	120000	7" reel



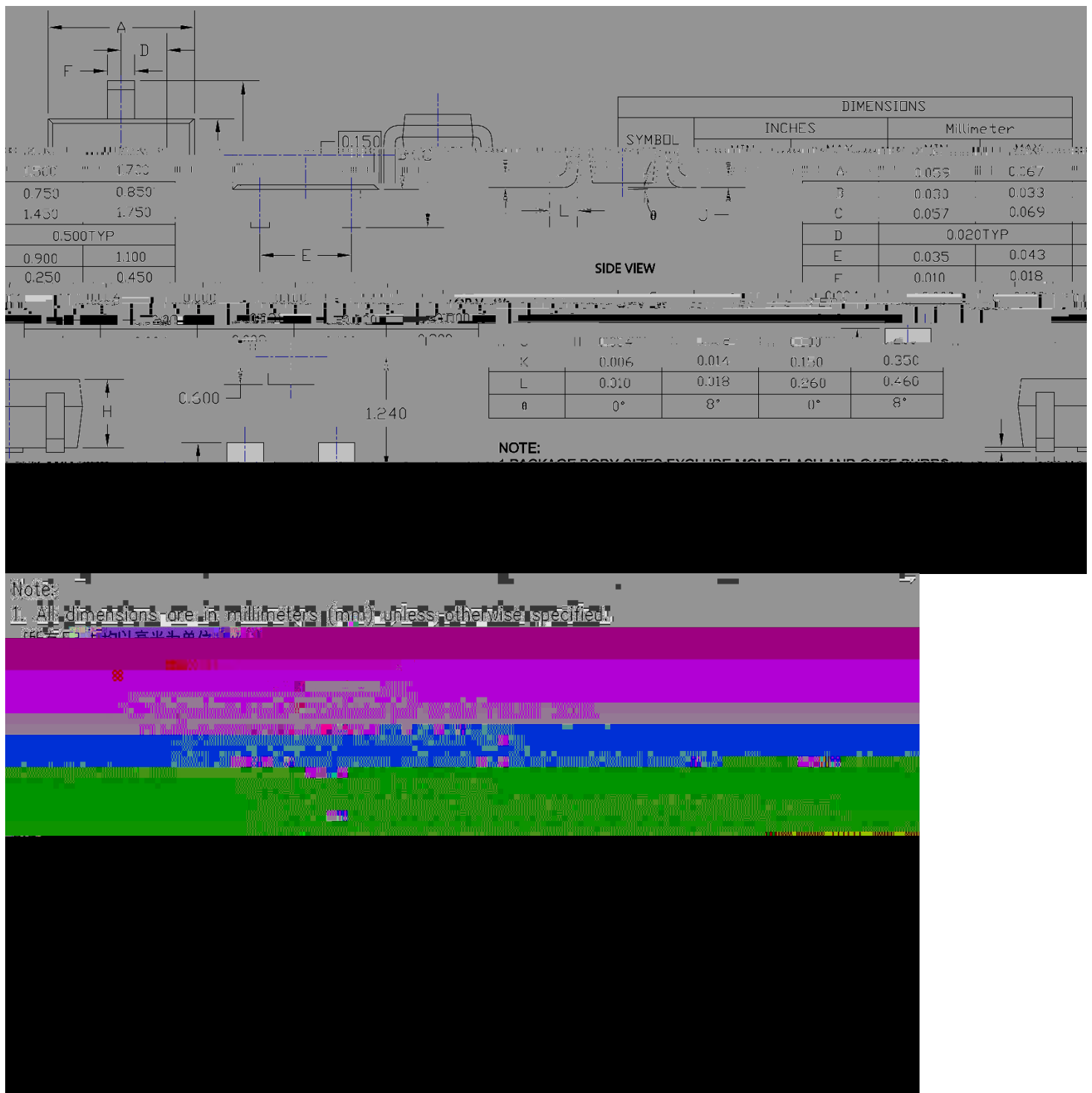
■ Characteristics (Typical)





DTC123JE

■ SOT-523 Package Outline Dimensions





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