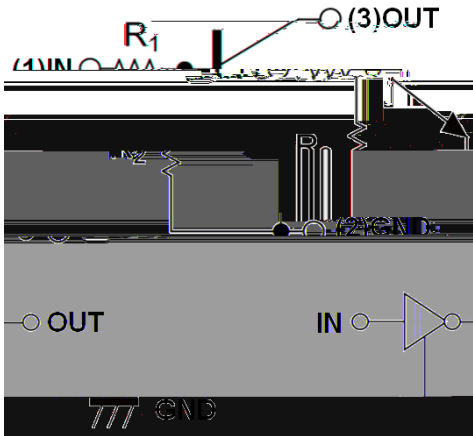




Moisture Sensitivity Level 1
Surface mount package ideally Suited for Automatic
Insertion
Halogen-free

: SOT-523
: Tin plated leads, solderable per
J-STD-002 and JESD22-B102
62



(Ta=25 Unless otherwise specified)

| Supply Voltage | V _{CC} | V | | 50 |
|----------------------|------------------|----|--|-------------|
| Input Voltage | V _{IN} | V | | -5 to +12 |
| Output Current | I _O | mA | | 100 |
| Power Dissipation | P _D | mW | | 150 |
| Junction Temperature | T _J | | | 150 |
| Storage Temperature | T _{STG} | | | -55 to +150 |



(Ta=25 unless otherwise specified)

| | | | | | | |
|----------------------|--------------|---------|---------------------------|------|-----|------|
| | | | | | | |
| Input voltage | $V_{I(off)}$ | V | $V_{CC}=5V, I_o=100\mu A$ | 0.3 | - | - |
| | $V_{I(on)}$ | V | $V_o=0.3V, I_o=20mA$ | - | - | 3 |
| Output voltage | $V_{O(on)}$ | V | $I_o / I_i = 10mA/0.5 mA$ | - | - | 0.3 |
| Input current | I_i | mA | $V_i=5V$ | - | - | 3.8 |
| Output current | $I_{O(off)}$ | μA | $V_{CC}=50V, V_i=0$ | - | - | 0.5 |
| DC current gain | G_i | | $V_o=5V, I_o = 10mA$ | 33 | - | - |
| Input resistance | R_1 | k | | 1.54 | 2.2 | 2.86 |
| Resistance ratio | R_2/R_1 | | | 3.6 | 4.5 | 5.5 |
| Transition frequency | f_T | MHz | $V_o=10V, I_o=-5mA$ | - | 250 | - |

(Example)

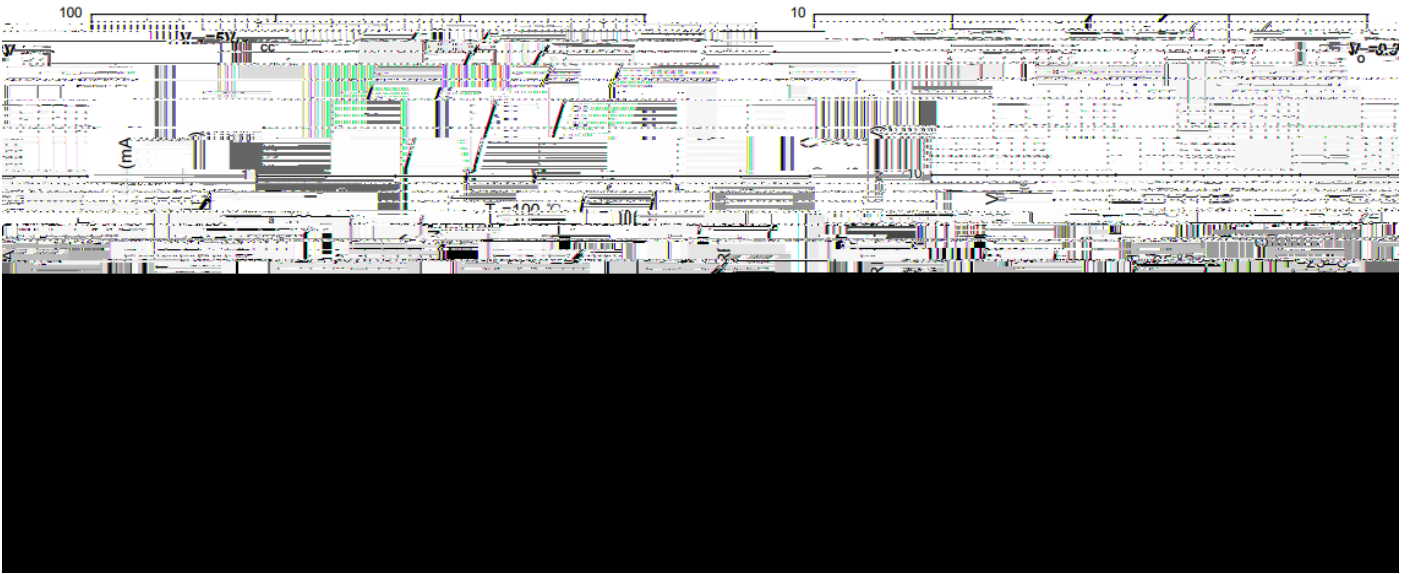
| | | | | | | |
|----------|----|--------------------|------|-------|--------|---------|
| | | | | | | |
| DTC123YE | F2 | Approximate 0.0027 | 3000 | 30000 | 120000 | 7" reel |



(Typical)

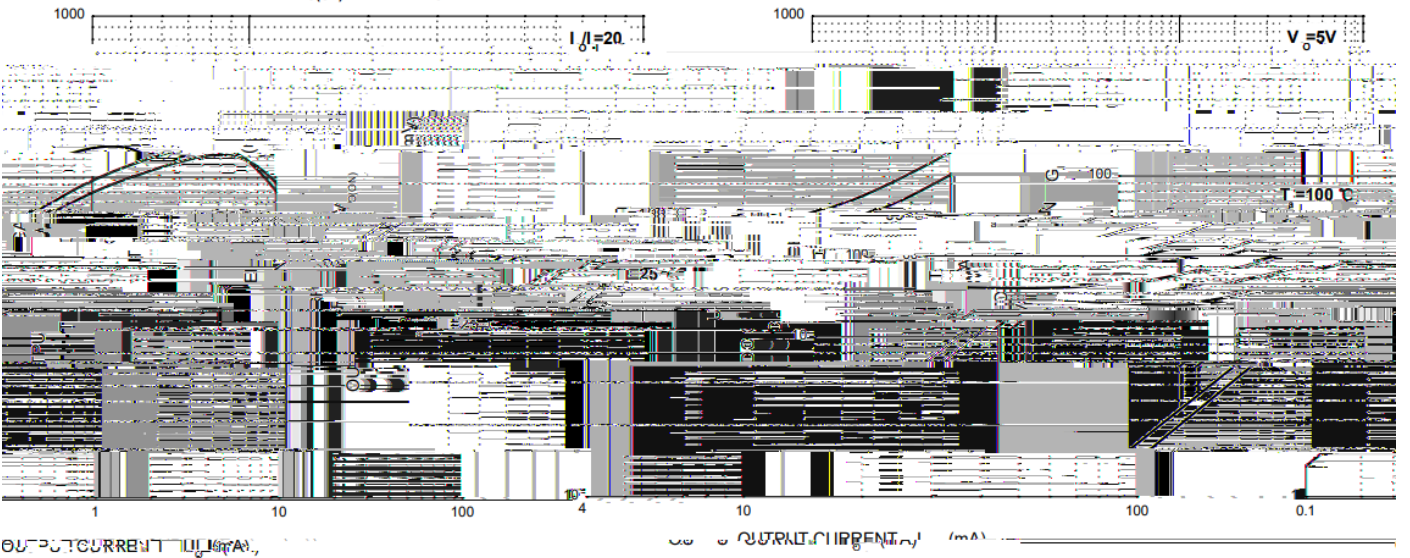
ON Characteristics

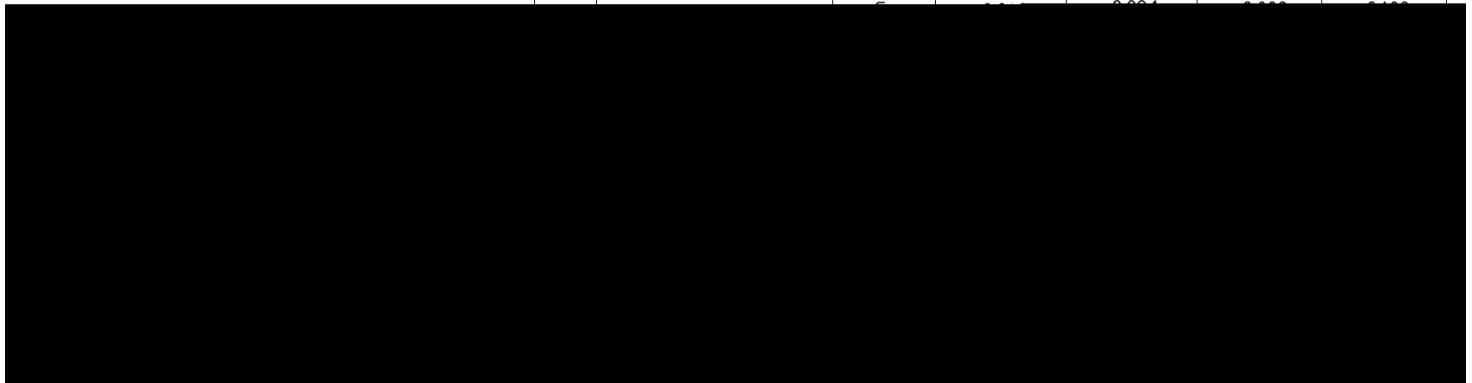
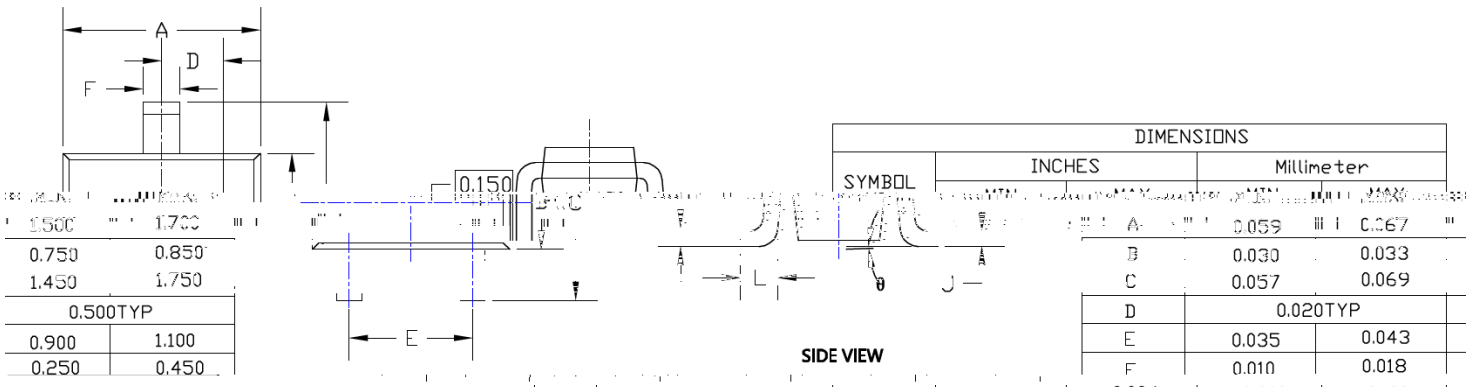
OFF Characteristics



$V_{O(ON)}$ — I_o

G_1 — I_o





Note:

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



