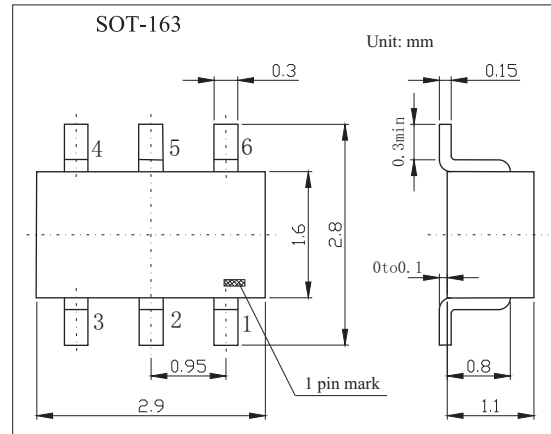
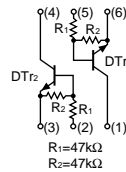


General purpose (dual digital transistors)

IMH2A

■ Features

- Dual NPN digital transistor

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---|----------------|-------------|------------------|
| Supply voltage | V_{CC} | 50 | V |
| Input voltage | V_{IN} | 40 | V |
| | | -10 | |
| Output current | I_O | 30 | mA |
| Collector current | $I_{C(MAX)}$ | 100 | mA |
| Power dissipation(Total) | P_d | 300 | mW |
| Operating and Storage and Temperature Range | T_j, T_{STG} | -55 to +150 | $^\circ\text{C}$ |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|----------------------|--------------|----------------------------------|------|-----|------|------------|
| Input voltage | $V_{I(off)}$ | $V_{CC}=5V, I_O=100\mu A$ | | | 0.5 | V |
| | $V_{I(on)}$ | $V_O=0.3V, I_O=2mA$ | 3 | | | V |
| Output voltage | $V_{O(on)}$ | $I_O=10mA, I_I=0.5mA$ | | | 0.3 | V |
| Input current | I_I | $V_I=5V$ | | | 0.18 | mA |
| Output current | $I_{O(off)}$ | $V_{CC}=50V, V_I=0V$ | | | 0.5 | μA |
| DC current gain | G_I | $V_O=5V, I_O=5mA$ | 68 | | | |
| Transition frequency | f_T | $V_{CE}=10V, I_E=-5mA, f=100MHz$ | | 250 | | MHz |
| Input resistance | R_1 | | 32.9 | 47 | 61.1 | k Ω |
| Resistance ratio | R_2 / R_1 | | 0.8 | 1 | 1.2 | |

■ Marking

| Marking | H2 |
|---------|----|
| | |

IMH2A

■ Typical Characteristics

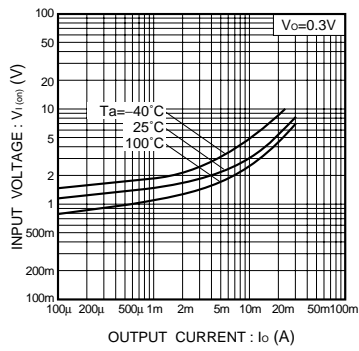


Fig.1 Input voltage vs. output current (on-characteristics)

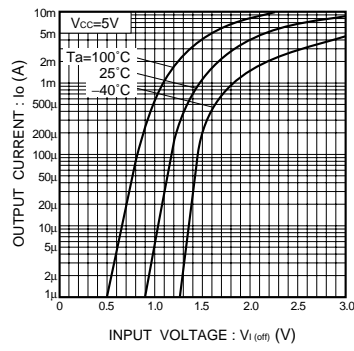


Fig.2 Output current vs. input voltage (off-characteristics)

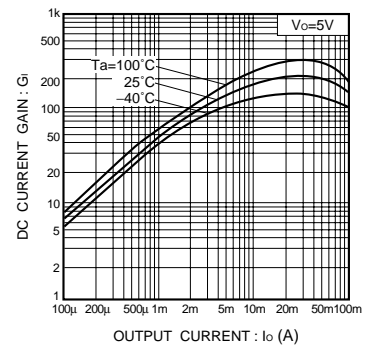


Fig.3 DC current gain vs. output current

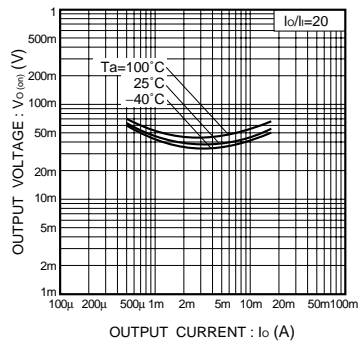


Fig.4 Output voltage vs. output current