

IMH20T1G

Dual Bias Resistor Transistor

NPN Surface Mount

- Low V_{CC} (sat) 80 mV max at $I_C/I_B = 50$ mA/2.5 mA
- High Current: $I_C = 600$ mA max
- Lead Free Plating

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$)

| Rating | Symbol | Value | Unit |
|--------------------------------|---------------|-------|------|
| Collector-Base Voltage | $V_{(BR)CBO}$ | 30 | Vdc |
| Collector-Emitter Voltage | $V_{(BR)CEO}$ | 15 | Vdc |
| Emitter-Base Voltage | $V_{(BR)EBO}$ | 5.0 | Vdc |
| Collector Current - Continuous | I_C | 600 | mAdc |

THERMAL CHARACTERISTICS

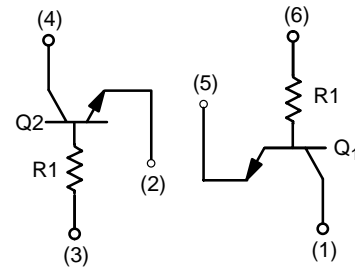
| Characteristic | Symbol | Max | Unit |
|----------------------|-----------|--------------|------------------|
| Power Dissipation* | P_D | 300 | mW |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | - 55 to +150 | $^\circ\text{C}$ |

*Total for both Elements



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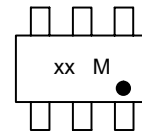


SC-74



SC-74

MARKING DIAGRAM



xx = Specific Device Code
M = Date Code

ORDERING INFORMATION

| Device† | Package | Shipping |
|----------|---------|------------------|
| IMH20T1G | SC-74 | 3000/Tape & Reel |

†The "T1" suffix refers to a 7-inch reel.

IMH20T1G

Q1 + Q2: NPN


ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| Characteristic | Symbol | Min | Max | Unit |
|---|---------------|------|------|-----------------|
| Collector-Emitter Breakdown Voltage ($I_C = 1.0 \text{ mAdc}$, $I_B = 0$) | $V_{(BR)CEO}$ | 15 | - | Vdc |
| Collector-Base Breakdown Voltage ($I_C = 50 \text{ }\mu\text{Adc}$, $I_E = 0$) | $V_{(BR)CBO}$ | 30 | - | Vdc |
| Emitter-Base Breakdown Voltage ($I_E = 50 \text{ }\mu\text{Adc}$, $I_C = 0$) | $V_{(BR)EBO}$ | 5.0 | - | Vdc |
| Collector-Base Cutoff Current ($V_{CB} = 20 \text{ Vdc}$, $I_E = 0$) | I_{CBO} | - | 0.5 | μAdc |
| Emitter-Base Cutoff Current ($V_{EB} = 4.0 \text{ V}$, $I_C = 0$) | I_{EBO} | - | 0.5 | μAdc |
| DC Current Gain (Note 1) ($V_{CE} = 5.0 \text{ Vdc}$, $I_C = 50 \text{ mAdc}$) | h_{FE} | 100 | 600 | - |
| Collector-Emitter Saturation Voltage ($I_C = 50 \text{ mAdc}$, $I_B = 2.5 \text{ mAdc}$) | $V_{CE(sat)}$ | - | 80 | mV |
| Input Resistance | R_1 | 1.54 | 2.86 | k Ω |

1. Pulse Test: Pulse Width $\leq 300 \text{ }\mu\text{s}$, D.C. $\leq 2\%$.

Notes

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