

# 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

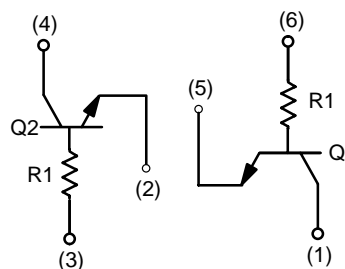
Characteristic	Symbol	Max	Unit
Power Dissipation*	$P_D$	300	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	- 55 to +150	$^\circ\text{C}$

\*Total for both Elements



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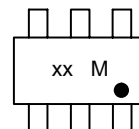


SC-74



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.

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## Q1 + Q2: NPN


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

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

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

## **Notes**

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