

6367255 MOTOROLA SC (DIODES/OPTO)

34C 38098 D

T-31-23

SILICON RF TRANSISTOR DICE (continued)

DIE NO. **MRFC8004** — NPN
LINE SOURCE — RF502.148



This die provides performance equal to or better than that of the following device types:

MRF8004

Designed for use in citizen-band up to 30 MHz. High breakdown voltages allow a high percentage of up-modulation in AM circuits.

- Specified 12.5 Vdc, 27 MHz Characteristics
P_{out} = 3.5 watts @ 30 MHz

6

Backside Collector

METALLIZATION —

Top Al

Back Au

BACKSIDE GOLD 3000Å

DIE THICKNESS 6 ± 2 mils

BONDING PAD SIZE —

Emitter 5.2 x 6.6 mils

Base 5.1 x 5.2 mils

ELECTRICAL CHARACTERISTICS (T_A = 25°C, Note 1)

Parameter	Test Conditions	Min	Max	Unit
BV _{CEO}	I _C = 50 mAdc	30	—	Vdc
BV _{CES} *	I _C = 200 mAdc	60	—	Vdc
BV _{EBO}	I _E = 1.0 mAdc	3.0	—	Vdc
I _{CBO}	V _{CB} = 15 Vdc	—	10	μAdc
h _{FE}	I _C = 400 mAdc, V _{CE} = 2.0 Vdc	10	—	—

*Pulsed through 25 mH inductor

- NOTES:
1. Because of the limitations of probe testing, only dc parameters are tested. These parameters must be measured using pulse techniques: pulse width ≤ 300 μs, duty cycle ≤ 2%.
 2. Detailed device characteristics are available from your Motorola sales representative.