

# MMCF5179 (SILICON)

## MMCF2857

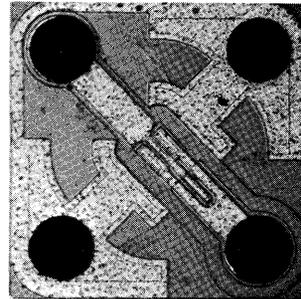
### FLIP-CHIP NPN RF SMALL-SIGNAL TRANSISTORS

Flip-Chip – NPN RF small-signal transistors designed for use in amplifier, oscillator and mixer applications.

- High Current-Gain Bandwidth Product
- Low Input Capacitance

#### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	$V_{CEO}$	15	Vdc
Collector-Base Voltage	$V_{CB}$	30	Vdc
Emitter-Base Voltage	$V_{EB}$	25	Vdc
Collector Current – Continuous	$I_C$	50	mAdc



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#### ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage ( $I_C = 3.0 \text{ mAdc}$ , $I_B = 0$ )	$BV_{CEO}$	12 15	– –	Vdc
Collector-Base Breakdown Voltage ( $I_C = 1.0 \mu\text{Adc}$ , $I_E = 0$ )	$BV_{CBO}$	20 30	– –	Vdc
Emitter-Base Breakdown Voltage ( $I_E = 10 \mu\text{Adc}$ , $I_C = 0$ )	$BV_{EBO}$	2.5	–	Vdc
Collector Cutoff Current ( $V_{CB} = 15 \text{ Vdc}$ , $I_E = 0$ )	$I_{CBO}$	–	10	nAdc
<b>ON CHARACTERISTICS</b>				
DC Current Gain ( $I_C = 3.0 \text{ mAdc}$ , $V_{CE} = 1.0 \text{ Vdc}$ )	$h_{FE}$	25 30	250 150	–
<b>DYNAMIC CHARACTERISTICS</b>				
Current-Gain – Bandwidth Product ( $I_C = 5.0 \text{ mAdc}$ , $V_{CE} = 6.0 \text{ Vdc}$ , $f = 100 \text{ MHz}$ )	$f_T$	900 1000	2000 1900	MHz
Input Capacitance ( $V_{BE} = 10 \text{ Vdc}$ , $I_E = 0$ , $f = 0.1 \text{ to } 1.0 \text{ MHz}$ )	$C_{cb}$	–	1.0	pF