

SURFACE MOUNT PRODUCTS (continued)

SOT-89 Transistors (continued)

RF

NPN

| Device | f_T | | $V_{BR}(CEO)$ | h_{FE} | | |
|---------|-----------|------------|---------------|----------|-----|------------|
| | Min (MHz) | I_C (mA) | | Min | Max | I_C (mA) |
| BFQ19 | 4000 | 50 | 15 | 25 | — | 50 |
| BFQ18A | 3200* | — | 15 | 25 | — | 50 |
| MXR5943 | 1200 | 50 | 30 | 25 | 300 | 50 |
| BFQ17 | 1200 | 150 | 25 | 25 | — | 50 |
| MR3866 | 500 | 50 | 30 | 10 | 200 | 50 |

PNP

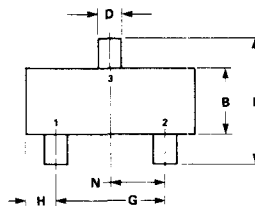
| | | | | | | |
|---------|------|----|----|----|-----|-----|
| MXR5583 | 1000 | 40 | 30 | 25 | 100 | 100 |
| MXR5160 | 500 | 50 | 40 | 10 | — | 50 |

*Typ

Package Dimensions

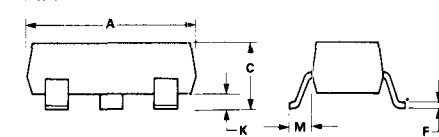
| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|--------|
| | MIN | MAX | MIN | MAX |
| A | 2.80 | 3.04 | 0.1102 | 0.1197 |
| B | 1.20 | 1.40 | 0.0472 | 0.0551 |
| C | 0.85 | 1.20 | 0.033 | 0.0472 |
| D | 0.37 | 0.46 | 0.0150 | 0.0177 |
| F | 0.085 | 0.130 | 0.0034 | 0.0051 |
| G | 1.78 | 2.04 | 0.0701 | 0.0807 |
| H | 0.51 | 0.60 | 0.0200 | 0.0236 |
| K | 0.10 | 0.25 | 0.0040 | 0.0098 |
| L | 2.10 | 2.50 | 0.0830 | 0.0984 |
| M | 0.45 | 0.60 | 0.0180 | 0.0236 |
| N | 0.89 | 1.02 | 0.0350 | 0.0401 |

**CASE 318-02
TO-236AA
Standard**



| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|--------|
| | MIN | MAX | MIN | MAX |
| A | 2.80 | 3.04 | 0.1102 | 0.1197 |
| B | 1.20 | 1.40 | 0.0472 | 0.0551 |
| C | 0.89 | 1.11 | 0.035 | 0.044 |
| D | 0.37 | 0.46 | 0.015 | 0.0177 |
| F | 0.085 | 0.130 | 0.0034 | 0.0051 |
| G | 1.78 | 2.04 | 0.0701 | 0.0807 |
| H | 0.51 | 0.60 | 0.0200 | 0.0236 |
| K | 0.013 | 0.100 | 0.0005 | 0.0040 |
| L | 2.10 | 2.50 | 0.0830 | 0.0984 |
| M | 0.45 | 0.60 | 0.018 | 0.0236 |
| N | 0.89 | 1.02 | 0.0350 | 0.0401 |

**CASE 318-03
TO-236AB
Low Profile**



SOT-23

STYLE 6:
PIN 1. BASE
2. EMITTER
3. COLLECTOR

STYLE 12:
PIN 1. CATHODE
2. CATHODE
3. ANODE

STYLE 8:
PIN 1. ANODE
2. NO CONNECTION
3. CATHODE

STYLE 14:
PIN 1. CATHODE
2. GATE
3. ANODE

STYLE 9:
PIN 1. ANODE
2. ANODE
3. CATHODE

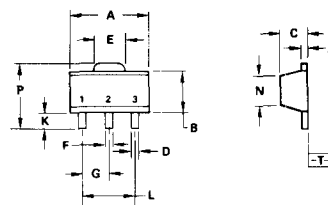
STYLE 18:
PIN 1. NO CONNECTION
2. CATHODE
3. ANODE

STYLE 10:
PIN 1. DRAIN
2. SOURCE
3. GATE

STYLE 20:
PIN 1. CATHODE
2. ANODE
3. GATE

STYLE 11:
PIN 1. ANODE
2. CATHODE
3. CATHODE-ANODE

SOT-89



| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|------|-----------|-------|
| | MIN | MAX | MIN | MAX |
| A | 4.40 | 4.60 | 0.174 | 0.181 |
| B | 2.29 | 2.60 | 0.091 | 0.102 |
| C | 1.40 | 1.60 | 0.056 | 0.062 |
| D | 0.36 | 0.48 | 0.015 | 0.018 |
| E | 1.62 | 1.80 | 0.064 | 0.070 |
| F | 0.44 | 0.53 | 0.018 | 0.020 |
| G | 1.50 BSC | | 0.059 BSC | |
| J | 0.35 | 0.44 | 0.014 | 0.017 |
| K | 0.80 | 1.04 | 0.032 | 0.040 |
| L | 3.00 BSC | | 0.118 BSC | |
| N | 2.04 | 2.28 | 0.081 | 0.089 |
| P | 3.94 | 4.25 | 0.156 | 0.167 |

CASE 345-01