

# Process: Bip 1 2 - 5

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## Complementary 40V High Speed Bipolar

### Key Features

**Absolute Maximum Rating: 40V**

**NPN (Emitter 2.0um x 4.0um):**

hFE 100 @Ic=100uA, Vce=5V

Va 350V

BVceo min.40V

ft 2.9GHz @Vce=20V

fmax 3.9GHz @Vce=20V

**Vertical PNP (Emitter 2.0um x 4.0um):**

hFE 80 @Ic=-100uA, Vce=-5V

Va 50V

BVceo min. -40V

ft 3.7GHz @Vce=-20V

fmax 2.9GHz @Vce=-20V

**Lateral PNP (Emitter 10umx 10um, Base 12um):**

hFE 150 @Ic=-10uA, Vce=-5V

Va 90V

BVceo min.40V

ft Tens of MHz

**Pch JFET (Gate W,L= 20um,10um)**

Vp typ.1.0V @Vd=5V, 1uA

Idss typ. 25uA @Vd=5V

BVceo min. 40V @100uA

**Resistor:**

HR POLY · Poly(200 ohm/sq.) · Base (3500 ohm/sq)

**Capacitor:**

PIM(0.46fF/um<sup>2</sup>)

**Metal:**

2layers