

Digital Circuits

RAY I and II Series TTL

| Type ¹ Number | Description | Fanout Function | TYPICAL CHARACTERISTICS | | | Available Packages | | | |
|-----------------------------|--------------------------------------|--------------------|---|---|------------------------------|-----------------------|----|---|----|
| | | | Tpd (ns) or Toggle Rate (Min) | Avg. Pwr. Function (mW) 50% Duty | DC Noise Margin (V) | 14 Pin | | | |
| | | | | | | CJ | CK | D | DC |
| RF30 | Single phase SRT flip-flop | 15 | 15 MHz | 30 | +1.1, -1.5 | X | X | X | X |
| RF31 | Single phase SRT flip-flop | 7 | 15 MHz | 30 | +1.1, -1.5 | X | X | X | X |
| RF32 | J-K flip-flop (AND inputs) | 12 | 15 MHz | 30 | +1.1, -1.5 | X | X | X | X |
| RF33 | J-K flip-flop (AND inputs) | 6 | 15 MHz | 30 | +1.1, -1.5 | X | X | X | X |
| RF50 | J-K flip-flop (AND inputs) | 15 | 20 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF51 | J-K flip-flop (AND inputs) | 7 | 20 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF52 | F-K flip-flop (AND inputs) | 12 | 20 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF53 | J-K flip-flop (AND inputs) | 6 | 20 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF60 | J-K flip-flop (OR inputs) | 15 | 20 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF61 | J-K flip-flop (OR inputs) | 7 | 20 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF62 | J-K flip-flop (OR inputs) | 12 | 20 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF63 | J-K flip-flop (OR inputs) | 6 | 20 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF100 | Dual J-K flip-flop (separate clocks) | 11 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF101 | Dual J-K flip-flop (separate clocks) | 6 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF102 | Dual J-K flip-flop (separate clocks) | 9 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF103 | Dual J-K flip-flop (separate clocks) | 5 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF110 | Dual J-K flip-flop (common clock) | 11 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF111 | Dual J-K flip-flop (common clock) | 6 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF112 | Dual J-K flip-flop (common clock) | 9 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF113 | Dual J-K flip-flop (common clock) | 5 | 35 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF120 | Dual J-K flip-flop (separate clocks) | 11 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF121 | Dual J-K flip-flop (separate clocks) | 6 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF122 | Dual J-K flip-flop (separate clocks) | 9 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF123 | Dual J-K flip-flop (separate clocks) | 5 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF130 | Dual J-K flip-flop (common clock) | 11 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF131 | Dual J-K flip-flop (common clock) | 6 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF132 | Dual J-K flip-flop (common clock) | 9 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF133 | Dual J-K flip-flop (common clock) | 5 | 50 MHz | 55/flip-flop | +1.0, -1.5 | X | X | X | X |
| RF200 | J-K flip-flop (AND inputs) | 11 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF201 | J-K flip-flop (AND inputs) | 6 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF202 | J-K flip-flop (AND inputs) | 9 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF203 | J-K flip-flop (AND inputs) | 5 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF210 | J-K flip-flop (OR inputs) | 11 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF211 | J-K flip-flop (OR inputs) | 6 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF212 | J-K flip-flop (OR inputs) | 9 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF213 | J-K flip-flop (OR inputs) | 5 | 50 MHz | 55 | +1.0, -1.5 | X | X | X | X |
| RF250 | J-K flip-flop (AND inputs) | 11 | 30 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF251 | J-K flip-flop (AND inputs) | 6 | 30 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF252 | J-K flip-flop (AND inputs) | 9 | 30 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF253 | J-K flip-flop (AND inputs) | 5 | 30 MHz | 50 | +1.1, -1.5 | X | X | X | X |
| RF260 | J-K flip-flop (OR inputs) | 11 | 30 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF261 | J-K flip-flop (OR inputs) | 6 | 30 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF262 | J-K flip-flop (OR inputs) | 9 | 30 MHz | 55 | +1.1, -1.5 | X | X | X | X |
| RF263 | J-K flip-flop (OR inputs) | 5 | 30 MHz | 55 | +1.1, -1.5 | X | X | X | X |

1. Operating temperature range, final digits 0 or 1: -55°C to +125°C; final digits 2 or 3: 0°C to +70°C.