

1.8V CMOS COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR



3.2 x 2.5 x 1.25mm

ASE3 SERIES



FEATURES:

- Compact and low in height
- Tri state
- Low supply voltage
- Suitable for high density SMT
- IR reflow capable
- Tight stability option available
- Seam sealed package

APPLICATIONS:

- CCD clock for VTR camera
- Equipment connected to PC or PC cards
- Laptop
- Mobile communication
- Bluetooth
- Wireless LAN
- Flat TV

STANDARD SPECIFICATIONS:

PARAMETERS

| | |
|-----------------------------|--|
| ABRACON P/N | ASE3 Series |
| Frequency Range | 0.625 ~ 133 MHz |
| Operating Temperature | -10°C to +70°C (See Options) |
| Storage Temperature | -55°C to +125°C |
| Overall Frequency Stability | ± 100 ppm max. (See Options) |
| Supply Voltage (Vdd) | 1.8 Vdc ± 5% |
| Input Current | See Table 1 |
| Symmetry | 45/55% @ 50%Vdd |
| Rise and Fall Time (Tr/Tf) | See Table 1 |
| Output Load | 15 pF (max) |
| Output Voltage | VOH = 0.9* Vdd min. VOL = 0.1* Vdd max. |
| Tristate Function | "1" (VIH ≥ 0.7*Vdd) or open: Oscillation "0" (VIL < 0.3*Vdd) : Hi Z |
| Peak to Peak Jitter | 32ps (Typical) |
| RMS Jitter | 4.5ps (Typical) |
| Stand-by current: | 10µA max. |

TABLE 1 - Input Current

| Freq. (MHz) | Idd max. (max. mA) | Tr/Tf max (nSec) |
|-------------|--------------------|------------------|
| ~ 30 MHz | 4 | 10 max. |
| ~ 75 MHz | 6 | 10 max. |
| ~ 133 MHz | 12 | 10 max. |

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASE3 - Frequency - □ - □ - □

| Operating Temp. Range | |
|-----------------------|----------------|
| I | 0°C to +50°C |
| D | -10°C to +60°C |
| E | -20°C to +70°C |
| F | -30°C to +70°C |
| N | -30°C to +85°C |
| L | -40°C to +85°C |

Contact ABRACON for wider temperature range.

| Overall Frequency Stability | |
|-----------------------------|--------|
| J(*) | ±20ppm |
| R | ±25ppm |
| K | ±30ppm |
| H | ±35ppm |
| B | ±40ppm |
| C | ±50ppm |

Temp option I, D, E, and -10 to +70C only.

| Packaging | |
|-----------|---------------|
| T | Tape and Reel |



