

# Epson SMD-340 1.44 MB Floppy Drive

## Performance

Track density	135 tpi
Disk rotation speed	300 rpm
Tracks per diskette	160
Number of heads	2
Recording method	MFM

## Recording density:

High density	17,434 bpi
Standard density	8717 bpi

## Data transfer rate:

High density	500 Kbits/sec
Standard density	250 Kbits/sec

## Seek time:

Track-to-track	3 ms
Average	100 ms
Latency	100 ms
Motor start time	500 ms

## Electrical Requirements

Operating voltage	5 VDC 10%
Ripple	0.1 V (maximum)

## Current load at 5.5 VDC:

Seeking	0.9 A
Spindle motor running	0.85 A
Power consumption	3.5 W

## Size and Weight

Height	25.4 mm (11.0 inches)
Width	101.6 mm (4.0 inches)
Depth	150.0 mm (5.91 inches)
Weight	395 g (13.92 oz)

## Environmental Limits

### Temperature range:

Operating	4 to 45C (40 to 113F)
Nonoperating	-20 to 65C (-4 to 139F)

### Relative humidity:

Operating	20% to 80% (noncondensing)
Nonoperating	10% to 90% (noncondensing)

### Vibration:

Operating	0.6 G
Nonoperating	3 G

### Shock:

Operating	5 G
Nonoperating	60 G

## Reliability

MTBF

10,000 POH

Error rate:

Soft

10E-9 per bit

Hard

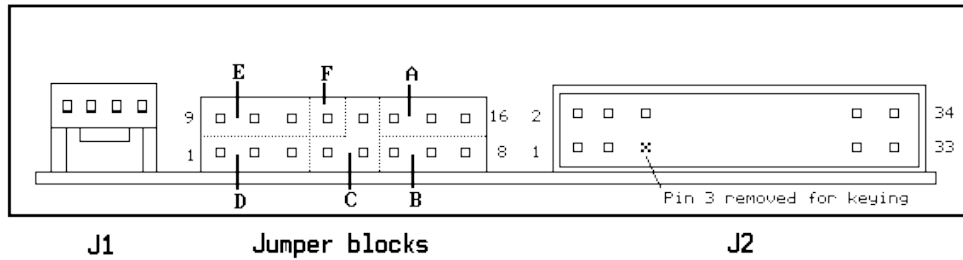
10E-12 per bit

Seek

10E-6 per seek

## Jumpers

Top of drive (rear view)



### Jumper block A

14 - 15*	Drive selected by DS0
15 - 16	Drive selected by DS1

### Jumper block D

1 - 2	2M mode set by HDI inp.
2 - 3*	2M mode set by (HDI) inp.

### Jumper block B

6 - 7	Drive selected by DS2
7 - 8	Drive selected by DS3

### Jumper block E

9	Grounding
10 - 11	Test terminals

### Jumper block C

4 - 5*	Mode switched internally
5 - 13	Mode switched by HDI inp.

### Jumper block F

12	Test terminal

\* indicates factory default setting

## Mounting

The drive is NOT designed for upside-down mounting.

## Connectors and Pinouts

Pin	Signal	Pin	Signal
1	Not connected	2	High density in
3	Pin removed	4	Not connected
5	Not connected	6	Drive select 3
7	+5 VDC	8	Index
9	+5 VDC	10	Drive select 0
11	+5 VDC	12	Drive select 1
13	Signal ground	14	Drive select 2
15	Signal ground	16	Motor on
17	Signal ground	18	Direction
19	Signal ground	20	Step
21	Signal ground	22	Write data
23	Signal ground	24	Write gate
25	Signal ground	26	Track 00
27	Signal ground	28	Write protect
29	Signal ground	30	Read data
31	Signal ground	32	Side select
33	Signal ground	34	Disk change