

# OKI semiconductor

## MSM511001RS

1,048,576-WORD × 1-BIT DYNAMIC RAM <Static Column>

### GENERAL DESCRIPTION

The MSM511001RS is a new generation dynamic RAM organized as 1,048,576 words by 1 bit. The technology used to fabricate the MSM511001RS is OKI's silicon gate CMOS process technology. The device operates from a single +5V power supply. Its I/O pins are TTL compatible.

### FEATURES

- Silicon gate, N-well CMOS, 1-transistor memory cell
- Standard 18-pin plastic DIP
- 1,048,576 words by 1 bit
- Family organization

Family	Access Time (MAX)	Cycle Time (MIN)	Power Dissipation	
			Operating (MAX)	Standby (MAX)
MSM511001-10RS	100 ns	190 ns	385 mW	11 mW
MSM511001-12RS	120 ns	220 ns	330 mW	

- Single +5V supply, ±10% tolerance
- Input: TTL compatible, address input, data input latch
- Output: TTL compatible, tristate, nonlatch
- Refresh: 512 cycles/8 ms
- Common I/O capability using "Early Write" operation
- Static column mode, read modify write capability
- $\overline{\text{RAS}}$  only refresh capability
- Built-in  $V_{\text{BB}}$  generator circuit

### FUNCTIONAL BLOCK DIAGRAM

