

N82S16, N82S116, N82S17, N82S117 – 256 Bit Ram (256 x 1)

GENERAL DESCRIPTION

The 82S16/116 and 82S17/117 are read/write memory arrays which feature either open collector or tri-state output options for optimization of word expansion in bused organizations. Memory expansion is further enhanced by full on-chip address decoding, 3 chip enable inputs and pnp input transistors which reduce input loading to 25 μ A for a high level, and -100 μ A for a low level.

During Write operation, the logical state of the output of both devices follows the complement of the data input being written. This feature allows faster execution of Write-Read cycles, enhancing the performance of systems utilizing indirect addressing modes, and/or requiring immediate verification following a Write cycle.

Both devices have fast read access and write cycle times, and thus are ideally suited in high-speed memory applications such as cache, buffers, scratch pads, writable control stores, etc.

All devices are available in the commercial temperature range (0°C to +75°C) and are specified as N82S16/116/117, F or N. The 82S16 and 82S17 are also available in the military temperature range (-55°C to +125°C) and are specified as S82S16/117.

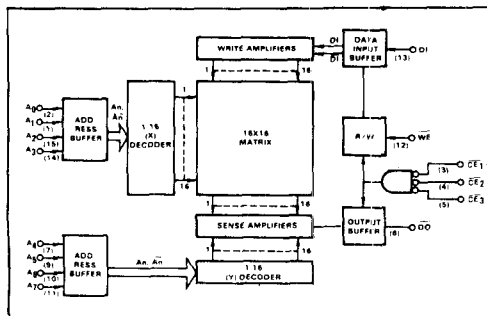
FEATURES

- Address access time:
82S116/117: 40ns max
- Write cycle time:
82S116/117: 25ns max
- Power dissipation: 1.5mW/bit typ
- Input loading:
N82S116/117: -100 μ A
- Output follows complement of data input during Write
- On-chip address decoding
- Output option:
82S16/116: Tri-state
82S17/117: Open collector
- Schottky clamped
- TTL compatible

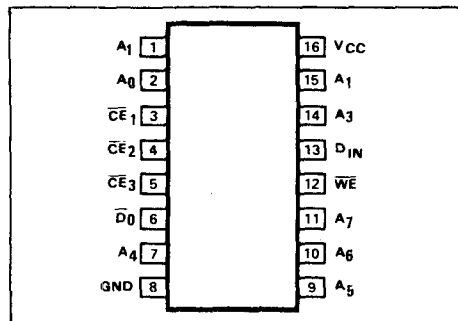
APPLICATIONS

- Buffer memory
- Writable control store
- Memory mapping
- Push down stack
- Scratch pad

BLOCK DIAGRAM



CONNECTION DIAGRAM



TRUTH TABLE

MODE	CE*	WE	DIN	DOUT	
				82S16/116	82S17/117
Read	0	1	X	Stored data	Stored data
Write "0"	0	0	0	1	1
Write "1"	0	0	1	0	0
Disabled	1	X	X	High-Z	1

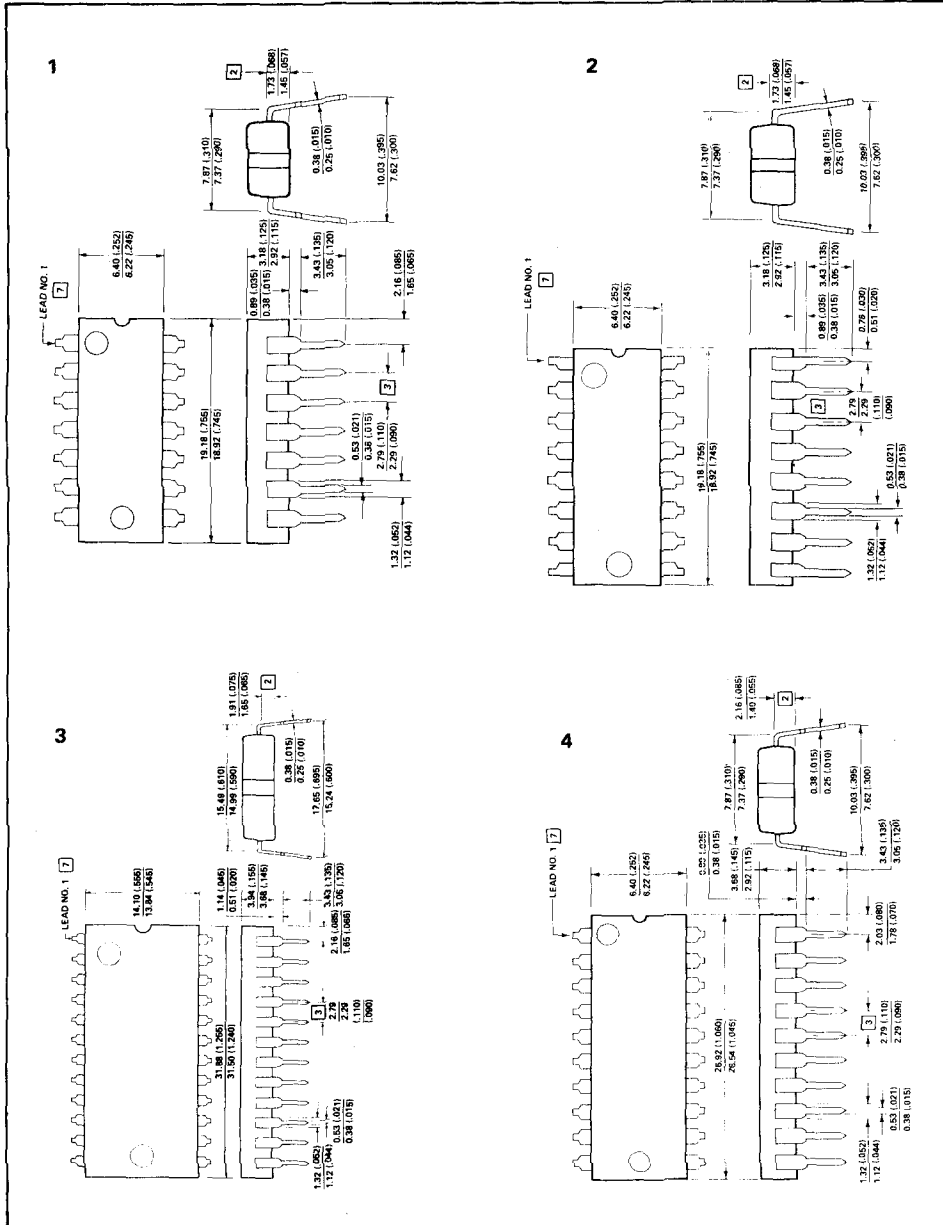
*"0" = All CE inputs low; "1" = one or more CE inputs high
X = Don't care.

REFERENCE TABLE

TYPE NO.	STOCK NO.	OUTLINE DRWG. NO.
N82S16F	56255F	2
N82S16N	56256D	2
N82S116F	56257B	2
N82S116N	56258X	2
N82S17F	56259R	2
N82S17N	56260A	2
N82S117F	56261X	2
N82S117N	56262H	2

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III GEMINI



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Outline Drawings



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FOR CURRENT PRICES PHONE
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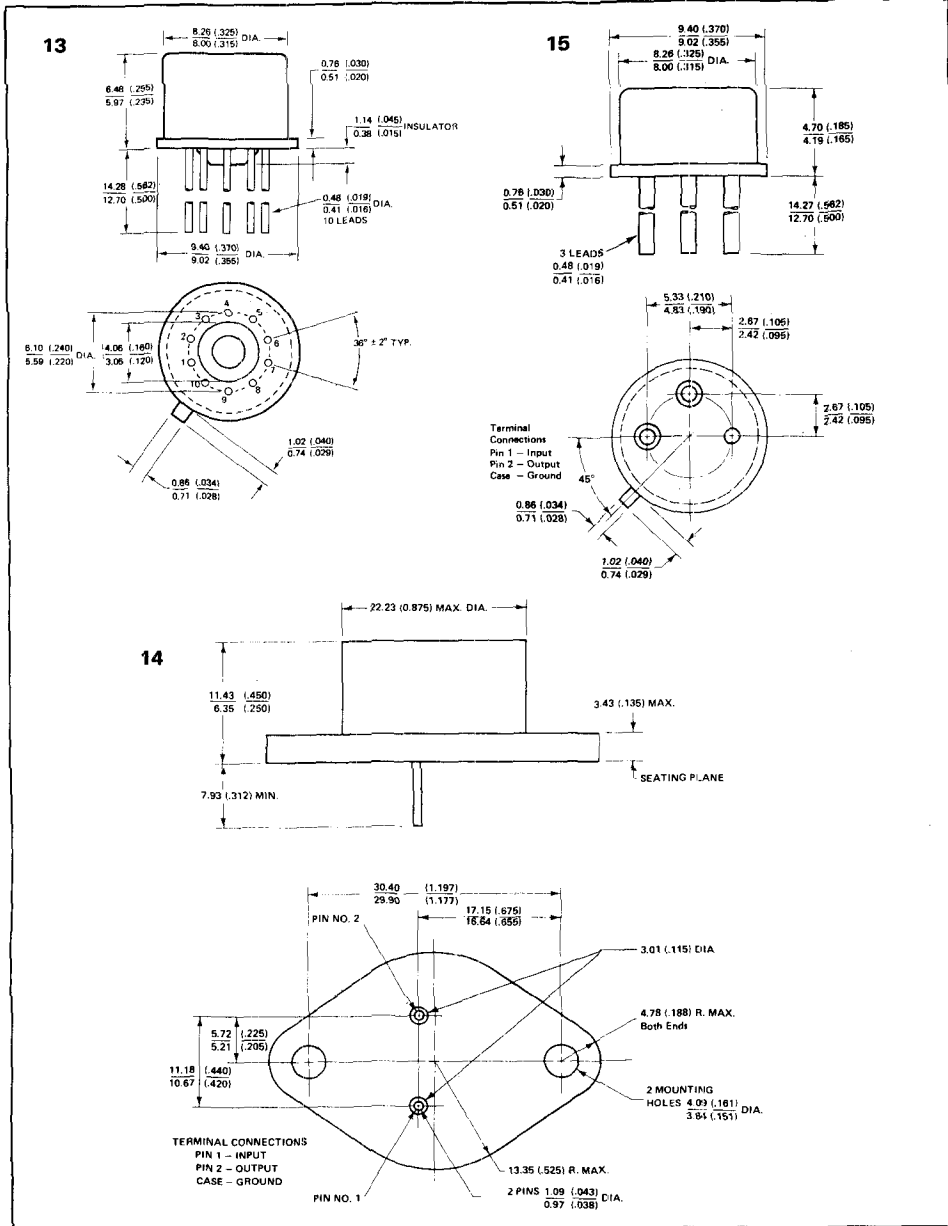


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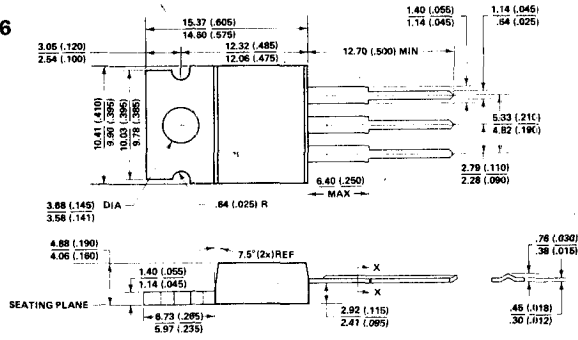
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16



17



19



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