

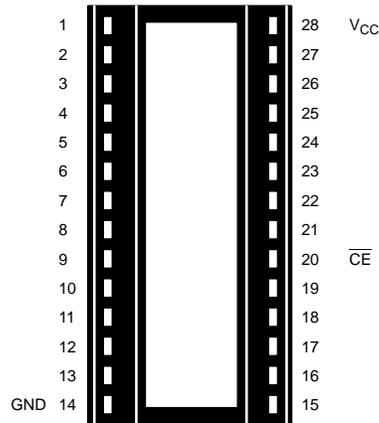
**DALLAS**  
SEMICONDUCTOR

**DS1213C**  
SmartSocket 256K

## FEATURES

- Accepts standard 32K x 8 CMOS static RAMs
- Embedded lithium energy cell retains RAM data
- Self-contained circuitry safeguards data
- Data retention time is greater than 10 years with the proper RAM selection
- Proven gas-tight socket contacts
- Operating temperature range 0°C to 70°C

## PIN ASSIGNMENT



28-PIN INTELLIGENT SOCKET

## PIN DESCRIPTION

- $\overline{CE}$  – Conditioned Chip Enable  
 $V_{CC}$  – Switched  $V_{CC}$   
 GND – Ground

All pins pass through except 20 and 28.

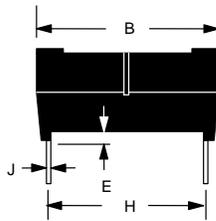
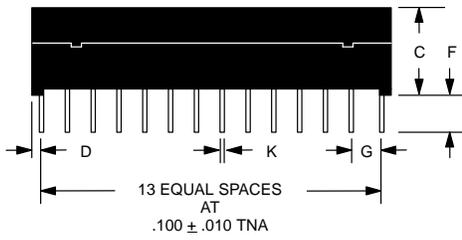
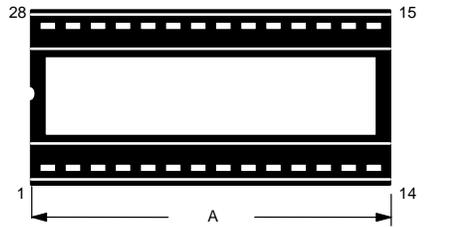
## DESCRIPTION

The DS1213C SmartSocket is a 28-pin, 600 mil DIP socket with a built-in CMOS controller circuit and an embedded lithium energy source. It accepts a 32K x 8 JEDEC bytewise CMOS static RAM. When the socket is mated with a CMOS RAM, it provides a complete solution to problems associated with memory volatility. The SmartSocket monitors incoming  $V_{CC}$  for an out-of-tolerance condition. When such a condition occurs, an internal lithium energy source is automatically switched on and write protection is unconditionally enabled to prevent data corruption.

Using the SmartSocket saves printed circuit board space since the SRAM/SmartSocket combination occupies no more area than the memory alone. The SmartSocket uses only Pins 20 and 28 for RAM control. All other pins are passed straight through.

See the DS1213B SmartSocket data sheet for technical details.

**DS1213C INTELLIGENT SOCKET 28-PIN (600 MIL DIP)**



PKG	28-PIN	
	DIM	MIN
A IN.	1.380	1.420
MM	35.05	36.07
B IN.	0.690	0.720
MM	17.53	18.29
C IN.	0.370	0.420
MM	9.39	10.67
D IN.	0.035	0.065
MM	0.89	1.65
E IN.	0.015	0.035
MM	0.38	0.89
F IN.	0.120	0.160
MM	3.04	4.06
G IN.	0.090	0.110
MM	2.29	2.79
H IN.	0.590	0.630
MM	14.99	16.00
J IN.	0.008	0.012
MM	0.20	0.30
K IN.	0.015	0.021
MM	0.38	0.53