# MILITARY 2K x 8 REGISTERED CMOS PROM/RPROM

## KEY FEATURES

- **Ultra-Fast Access Time**
  - — 35 ns Setup
  - — 15 ns Clock to Output
- **Low Power Consumption**
- **Fast Programming**
- **Programmable Synchronous or Asynchronous Output Enable**
- **DESC SMD Nos. 5962-88735/5962-87529**
- **Pin Compatible with AM27S45 and CY7C245**
- **Immune to Latch-UP**
  - — Up to 200 mA
- **ESD Protection Exceeds 2000 Volts**
- **Programmable Asynchronous Initialize Register**

## GENERAL DESCRIPTION

The WS57C45 is an extremely High Performance 16K UV Erasable Registered CMOS RPROM. It is a direct drop-in replacement for such devices as the AM27S45 and CY7C245.

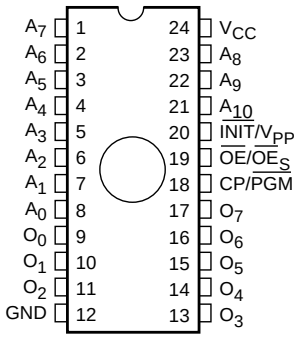
To meet the requirements of systems which execute and fetch instructions simultaneously, an 8-bit parallel data register has been provided at the output which allows RPROM data to be stored while other data is being addressed.

An asynchronous initialization feature has been provided which enables a user programmable 2049th word to be placed on the outputs independent of the system clock. This feature can be used to force an initialize word or provide a preset or clear function.

A further advantage of the WS57C45 over Bipolar PROM devices is the fact that it utilizes a proven EPROM technology. This enables the entire memory array to be tested for switching characteristics and functionality after assembly. Unlike devices which cannot be erased, every WS57C45 RPROM in a windowed package is 100% tested with worst case test patterns both before and after assembly.

## PIN CONFIGURATION

**TOP VIEW**
**CERDIP**




## PRODUCT SELECTION GUIDE

| PARAMETER | WS57C45-35 | WS57C45-45 |
|---|---|---|
| Set Up Time (Max) | 35 ns | 45 ns |
| Clock to Output (Max) | 15 ns | 25 ns |

## ORDERING INFORMATION

| PART NUMBER | SPEED (ns) | PACKAGE TYPE | PACKAGE DRAWING | OPERATING TEMPERATURE RANGE | WSI MANUFACTURING PROCEDURE |
|---|---|---|---|---|---|
| WS57C45-35TMB* | 35 | 24 Pin CERDIP, 0.3" | T1 | Military | MIL-STD-883C |
| WS57C45-45KMB* | 45 | 24 Pin CERDIP, 0.3" | K1 | Military | MIL-STD-883C |
| WS57C45-45TMB* | 45 | 24 Pin CERDIP, 0.3" | T1 | Military | MIL-STD-883C |

**NOTE:** The actual part marking will not include the initials "WS."

*SMD product. See page 5-1 for DESC SMD numbers.

## PROGRAMMING/ALGORITHMS/ERASURE/PROGRAMMERS

REFER TO PAGE 5-1

The WS57C45 is programmed using Algorithm A shown on page 5-3.

***For complete data sheet and electrical specifications see page 2-21.***