

Device Information

HCTS139MS

[Printer Friendly Version](#)**Decoder/Demultiplexer, 2-to-4, TTL Inputs, Dual, Rad-Hard, High-Speed, CMOS, Logic**[Get Datasheet](#)**Ordering Information**

Part No.	Status	Temp.	Package	MSL	SMD	Price US \$	
HCTS139DMSR	Active	-	16 Ld SBDIP	N/A	5962R9575301VEC	Contact Us	Buy
HCTS139KMSR	Active	-	16 Ld FlatPack	N/A	5962R9575301VXC	Contact Us	Buy

The price listed is the manufacturer's suggested retail price for quantities between 100 and 999 units. However, prices in today's market are fluid and may change without notice.

MSL = Moisture Sensitivity Level - per IPC/JEDEC J-STD-020

SMD = Standard Microcircuit Drawing

Description

The Intersil HCTS139MS is a Radiation Hardened 2-to-4 line Decoder/Demultiplexer with an active low enable (E). Data on the select inputs (A0, A1) cause one of the four normally high outputs to go to a low logic level. The Demultiplexing function is performed by using the enable input as the data input.

The HCTS139MS utilizes advanced CMOS/SOS technology to achieve high-speed operation. This device is a member of radiation hardened, high-speed, CMOS/SOS Logic Family with TTL input compatibility.

The HCTS139MS is supplied in a 16 lead Ceramic flatpack (K suffix) or a SBDIP Package (D suffix).

Key Features

- 3 Micron Radiation Hardened SOS CMOS
- Total Dose 200K RAD (Si)
- SEP Effective LET No Upsets: >100 MEV-cm²/mg
- Single Event Upset (SEU) Immunity < 2 x 10⁻⁹ Errors/ Bit-Day (Typ)
- Dose Rate Survivability: >1 x 10¹² RAD (Si)/s
- Dose Rate Upset >10¹⁰ RAD (Si)/s 20ns Pulse
- Latch-Up Free Under Any Conditions
- Fanout (Over Temperature Range)
 - Bus Driver Outputs - 15 LSTTL Loads
- Military Temperature Range: -55°C to +125°C
- Significant Power Reduction Compared to LSTTL ICs
- DC Operating Voltage Range: 4.5V to 5.5V
- LSTTL Input Compatibility
 - VIL = 0.8V Max
 - VIH = VCC/2 Min
- Input Current Levels I_i d 5μA at VOL, VOH

Related Documentation



Datasheet(s):

- [Radiation Hardened Dual 2-to-4 Line Decoder/Demultiplexer](#)



Military SMD(s):

- [Radiation Hardened Dual 2-to-4 Line Decoder/Demultiplexer](#)

Parametric Data

RH Level	200
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Related Devices



[Parametric Table](#)

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