

No.1 share in Japanese automotive market

We offer a wide range of product lineups with high reliability, high performance, and high quality.

Note



Note: Based on our research

Interface	Operation Guarantee	Series	Memory capacity	Product name	8-Pin SOP	8-Pin TSSOP	TMSOP-8	HSNT-8(2030)		
3-wire serial E ² PROM	105°C operation guarantee	S-93C H Series	1K-bit	S-93C46C	●	●	●	●		
			2K-bit	S-93C56C	●	●	●	●		
			4K-bit	S-93C66C	●	●	●	●		
			8K-bit	S-93C76C	●	●	●	●		
			16K-bit	S-93C86C	●	●	●	●		
	125°C operation guarantee	S-93A Series	1K-bit	S-93A46B	●	●	●	●		
			2K-bit	S-93A56B	●	●	●	●		
			4K-bit	S-93A66B	●	●	●	●		
			8K-bit	S-93A76B	●	●	●	●		
			16K-bit	S-93A86B	●	●	●	●		
	150°C operation guarantee	S-93S Series	1K-bit	S-93S46A	●	●	●	●		
			2K-bit	S-93S56A	●	●	●	●		
			4K-bit	S-93S66A	●	●	●	●		
	2-wire serial E ² PROM	105°C operation guarantee	S-24CS H Series	1K-bit	S-24CS01A	●	●	●	●	
				2K-bit	S-24CS02A	●	●	●	●	
4K-bit				S-24CS04A	●	●	●	●		
105°C operation guarantee		S-24C H Series	8K-bit	S-24C08CH	●	●	●	●		
			16K-bit	S-24C16CH	●	●	●	●		
			32K-bit	S-24C32CH	●	●	●	●		
			64K-bit	S-24C64CH	●	●	●	●		
			128K-bit	S-24C128CH	●	●	●	●		
			S-25C H Series	105°C operation guarantee	1K-bit	S-25C010A0H	●	●	●	●
					2K-bit	S-25C020A0H	●	●	●	●
4K-bit	S-25C040A0H	●			●	●	●			
8K-bit	S-25C080A0H	●			●	●	●			
16K-bit	S-25C160A0H	●			●	●	●			
32K-bit	S-25C320A0H	●			●	●	●			
64K-bit	S-25C640A0H	●			●	●	●			
S-25A Series	125°C operation guarantee	1K-bit	S-25A010A	●	●	●	●			
		2K-bit	S-25A020A	●	●	●	●			
		4K-bit	S-25A040A	●	●	●	●			
		8K-bit	S-25A080A / S-25A080B	●	●	●	● ^{*1}			
		16K-bit	S-25A160A / S-25A160B	●	●	●	● ^{*1}			
		32K-bit	S-25A320A / S-25A320B	●	●	●	● ^{*1}			
		64K-bit	S-25A640A / S-25A640B	●	●	●	● ^{*1}			
		128K-bit	S-25A128B	●	●	●	●			
		256K-bit	S-25A256B	●	●	●	●			

Refer to the datasheet of each product for details.

*1 : S-25AxxxB only

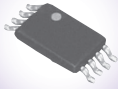
Packages

8-pin SOP



6.0×5.02×t1.75 (max.)

8-pin TSSOP



6.4×3.0×t1.1 (max.)

TMSOP-8

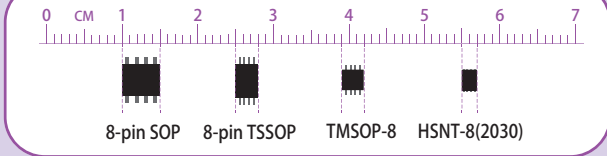


4.0×2.9×t0.8 (max.)

HSNT-8(2030)

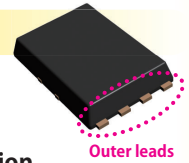
3.0×2.0×t0.5 (max.)
(Unit: mm)

Size comparison



Automotive small package HSNT-8(2030)

Outer leads help...



- ✓ Easier mounting
- ✓ Stronger mounting
- ✓ Automatic visual inspection after mounting

Land-compatible with 3mm × 2mm
8-pin DFN package^{Note!}

Note: Based on our research

Specifications

Refer to the datasheet of each product for details.

Interface	Memory capacity (bit)	Product name	Operation temperature range	Operating voltage range	Operation frequency	Write time	Endurance (85°C)	Data retention	Malfunction prevention function
3-wire	1K/2K/4K/8K/16K	S-93C46C/56C/66C/76C/86C	-40 to 105°C	1.6 to 5.5V ^{*1}	2MHz max.	4ms max.	1 million	50 years	LVDET, CPM
	1K/2K/4K/8K/16K	S-93A46B/56B/66B/76B/86B	-40 to 125°C	2.5 to 5.5V	2MHz max.	4ms max.	1 million	50 years	LVDET, CPM, Schmitt trigger
	1K/2K/4K	S-93S46A/56A/66A	-40 to 150°C	4.0 to 5.5V	1MHz max.	10ms max.	1 million	20 years	LVDET, CPM, Schmitt trigger
2-wire (I ² C-bus)	1K/2K/4K	S-24CS01A/02A/04A	-40 to 105°C	2.55 to 5.5V	350kHz max.	10ms max.	1 million	20 years	LVDET, Schmitt trigger, Write protect function
	8K/16K/32K/64K/128K	S-24C08CH/16CH/32CH/64CH/128CH	-40 to 105°C	2.5 to 5.5V	400kHz max.	5ms max.	300,000	25 years	LVDET, Schmitt trigger, Write protect function
SPI bus	1K/2K/4K/8K/16K/32K/64K	S-25A010A/020A/040A/080A/160A/320A/640A	-40 to 125°C	2.5 to 5.5V	6.5MHz max. ^{*2}	4ms max.	1 million	50 years	LVDET, CPM, Schmitt trigger, Write protect function
	8K/16K/32K/64K/128K/256K	S-25A080B/160B/320B/640B/128B/256B	-40 to 125°C	2.5 to 5.5V	6.5MHz max. ^{*2}	5ms max.	700,000	50 years	LVDET, CPM, Schmitt trigger, Write protect function
	1K/2K/4K/8K	S-25C010A0H/020A0H/040A0H/080A0H	-40 to 105°C	2.5 to 5.5V	6.5MHz max.	4ms max.	1 million	50 years	LVDET, CPM, Schmitt trigger, Write protect function
	16K/32K/64K/128K	S-25C160A0H/320A0H/640A0H/128A0H	-40 to 105°C	2.5 to 5.5V	5MHz max.	5ms max.	300,000	25 years	LVDET, CPM, Schmitt trigger, Write protect function

*1 READ operation only. WRITE operation: 1.8 to 5.5V
*2 S-25A640A, S-25A256B: 5MHz max.

Remark LVDET: Write protect function during the low power supply voltage
CPM: Function to protect against write due to erroneous instruction recognition

For Automotive Components

- Engine
- Automated Driving System
- HEV, EV Related
- In-vehicle Camera
- On Board Charger
- LiDAR
- Inverter
- Millimeter-wave Radar
- Transmission
- Brake Control System
- Power Steering
- ADAS



- BCM
- T-BOX
- Air Conditioner
- Car Navigation
- Head-up Display
- Car Audio
- Odometer
- Power Window
- Smart Mirror
- Smart Key
- Headlamp
- ETC



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