

# **Product Advisory (PA)**

Subject: Correction to the Renesas HSO-26C31, HSO-26C32, HSO-26CLV31, HSO-26CLV32,

HS0-26CT31, HS0-26CT32 Datasheets and SMDs

Publication Date: 10/22/2021 Effective Date: 10/22/2021

# **Revision Description:**

Initial Release

# **Description of Change:**

This notice is to inform you of Datasheet/SMD corrections as below;

1. Updates to Die Characteristics section. Die Thickness Dimension is updated on datasheet and SMD. Glassivation, M1 Thickness, M2 Thickness is only updated on datasheet, no change to SMD.

Corrections are reflected in Appendix A of the notice.

Products Impacted by the change;

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SMD#	Renesas Part#	SMD#	Renesas Part#	SMD#	Renesas Part#			
5962F9568901V9A	HS0-26C32RH-Q	5962F9568902V9A	HS0-26CLV32RH-Q	5962F9563201V9A	HS0-26CT31RH-Q			
N/A	HS0-26C32RH/SAMPLE	N/A	HSO-26CLV32RH/SAMPLE	N/A	HS0-26C31RH/SAMPLE			
5962F9568903V9A	HS0-26C32EH-Q	5962F9568904V9A	HS0-26CLV32EH-Q	5962F9666301V9A	HS0-26C31RH-Q			
5962F9666302V9A	HS0-26CLV31RH-Q	5962F9563101V9A	HS0-26CT32RH-Q	5962F9666303V9A	HS0-26C31EH-Q			
5962F9666304V9A	HS0-26CLV31EH-Q	N/A	HSO-26CT32RH/SAMPLE					
N/A	HS0-26CLV31RH/SAMPLE	5962F9563102V9A	HS0-26CT32EH-Q					

# Reason for Change:

Change corrects the datasheet and SMD to reflect the actual product characteristics. Details regarding the change are contained within Appendix A, for an updated datasheet please contact your local sales or marketing representative.

# Impact on fit, form, function, quality & reliability:

The change will have no impact on the form, fit, function, quality, reliability and environmental compliance of the devices.

# **Product Identification:**

There have been no changes to the product, this is a documentation correction only. There will be no change in the external marking of the products.

Qualification status: Not Applicable, correction only

Sample availability: 10/22/2021

Device material declaration: Available upon request

Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Intersil within 30 days of the publication date.

For additional information regarding this notice, please contact your regional change coordinator (below)						
Americas: PCN-US@Renesas.COM	Europe: PCN-EU@Renesas.COM	Japan: PCN-JP@Renesas.COM	Asia Pac: PCN-APAC@Renesas.COM			



# Appendix A:

# Datasheet changes for HS0-26C32

# FROM:

HS-26C32RH, HS-26C32EH

### **Die Characteristics**

#### DIE DIMENSIONS:

78 mils x 123 mils (1970µm x 3120µm)

#### INTERFACE MATERIALS:

Type: SiO<sub>2</sub> Thickness: 10kÅ ± 1kÅ

# M2: Al/Si/Cu **Worst Case Current Density:**

Top Metallization:

M1: Mo/Tiw

Thickness: 5800Å

Thickness: 5800Å

<2.0 x 10<sup>5</sup>A/cm<sup>2</sup>

#### Bond Pad Size:

110µm x 100µm

# TO:

HS-26C32RH, HS-26C32EH

#### **Die Characteristics**

78 mils x 123 mils x 19 mils ±1 mil (1981µm x 3124µm x 483µm ±25µm

#### INTERFACE MATERIALS:

Type: PSG (Pho Thickness: 8kÅ ±1kÅ

#### Metallization

M1: Mo/TiW (Bottom M2: Al/Si/Cu (Top) Thickness: 10kÅ ±1kÅ

AVLSI1RA

#### Backside Finish:

Silicon

#### ASSEMBLY RELATED INFORMATION:

#### Substrate Potential (Powered Up):

Internally tied to V<sub>DD</sub>

### Worst Case Current De

< 2.0e5 A/cm<sup>2</sup>

#### Bond Pad Size:

110µm x 100µm

# Transistor Count:

315

# Datasheet changes for HSO-26C31

# FROM:

HS-26C31RH, HS-26C31EH

# Die Characteristics

#### DIE DIMENSIONS:

96.5 mils x 195 mils x 21 mils (2450 x 4950)

#### INTERFACE MATERIALS:

Type: PSG (Phosphorus Silicon Glass) Thickness: 10kÅ ±1kÅ

#### Metallization:

Thickness: 5800Å M2: Al/Si/Cu (Top) Thickness: 10kÅ ±1kÅ

AVLSI1RA

# Silicon

#### ASSEMBLY RELATED INFORMATION:

# $V_{DD}$

#### ADDITIONAL INFORMATION:

#### **Worst Case Current Density:**

<2.0x10<sup>5</sup>A/cm<sup>2</sup>

# Bond Pad Size

110µmx100µm

# TO:

HS-26C31RH, HS-26C31EH

#### Die Characteristics

96.5 mils x 195 mils x 19 mils ±1mil (2451µm x 4953µm x 483µm ±25µm)

# INTERFACE MATERIALS:

#### lassivation:

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization:

M1: Mo/TiW (Bottom) Thickness: 5800Å ±1kÅ M2: Al/Si/Cu (Top)
Thickness: 10kÅ ±1kÅ

### Substrate:

AVLSI1RA

#### Backside Finish:

# ASSEMBLY RELATED INFORMATION:

Internally tied to  $\mathbf{V}_{\mathbf{DD}}$ 

### ADDITIONAL INFORMATION:

**Worst Case Current Density:** 

# $<2.0x10^5 A/cm^2$

**Bond Pad Size:** 

110µmx100µm



# Datasheet changes for HSO-26CLV31

# FROM:

HS-26CLV31RH, HS-26CLV31EH

#### Die Characteristics

#### DIE DIMENSIONS:

96.5 mils x 195 mils x 21 mils (2450 x 4950)

#### INTERFACE MATERIALS:

#### Glassivation:

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization:

Bottom: Mo/TiW Thickness: 5800Å ±1kÅ Top: AlSiCu (Top) Thickness: 10kÅ ±1kÅ

#### Substrate:

AVLSI1RA

#### **Backside Finish**

Silicon

#### ASSEMBLY RELATED INFORMATION:

Substrate Potential (Powered Up)

 $V_{DD}$ 

#### ADDITIONAL INFORMATION:

#### Worst Case Current Density

<2.0x10<sup>5</sup>A/cm<sup>2</sup>

# Bond Pad Size:

110µmx100µm

# TO:

HS-26CLV31RH, HS-26CLV31EH

# **Die Characteristics**

#### DIE DIMENSIONS:

96.5 mils x 195 mils x 19 mils ±1mil 2451µm x 4953µm x 483µm ±25µm

#### INTERFACE MATERIALS:

#### Blassivation:

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization:

M1: Mo/TiW (Bottom)
Thickness: 5800Å ±1kÅ
M2: AISiCu (Top)

#### Substrate

AVLSI1RA

#### ackside Finis

Silicon

#### ASSEMBLY RELATED INFORMATION:

#### Substrate Potential (Powered Up):

Internally tied to V<sub>DD</sub>

#### ADDITIONAL INFORMATION:

Worst Case Current Density: <2.0x10<sup>5</sup>A/cm<sup>2</sup>

#### <2.0x10°A/cm²

Bond Pad Size:

# Datasheet changes for HS0-26CLV32

# FROM:

HS-26CLV32RH, HS-26CLV32EH

# **Die Characteristics**

#### DIE DIMENSIONS:

78 mils x 123 mils x 21 mils (1970μm x 3120μm)

### INTERFACE MATERIALS:

#### Glassivation:

Type: PSG (Phosphorus Silicon Glass) Thickness:  $8k\mathring{A} \pm 1k\mathring{A}$ 

#### Substrate

 ${\bf AVLSI1RA, Silicon\ backside,\ V_{DD}\ backside\ potential}$ 

#### Metallization:

Bottom: Mo/TiW Thickness: 5800Å ±1kÅ Top: Al/Si/Cu Thickness: 10kÅ ±1kÅ

# Worst Case Current Density: $<2.0 \times 10^5 \text{A/cm}^2$

<2.0 x 10°A/cm²

#### Bond Pad Size:

110µmx100µm

# TO:

HS-26CLV32RH, HS-26CLV32EH

# **Die Characteristics**

#### DIE DIMENSIONS

78 mils x 123 mils x 19mils ±1mil (1981µm x 3124µm x 483µm ±25µm

### INTERFACE MATERIALS:

#### Glassivation

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization:

M1: Mo/TiW (Bottom) Thickness:  $5800\text{\AA} \pm 1\text{k}\text{\AA}$ M2: Al/Si/Cu (Top) Thickness:  $10\text{k}\text{\AA} \pm 1\text{k}\text{Å}$ 

#### Substrate:

AVLSI1RA

### Backside Finish:

Silicon

### ASSEMBLY RELATED INFORMATION:

#### Substrate Potential (Powered Up): Internally tied to V<sub>DD</sub>

Worst Case Current Density:

# < 2.0e5A/cm<sup>2</sup> Bond Pad Size:

110µm x 100µm

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315



# Datasheet changes for HSO-26CT32

# FROM:

HS-26CT32RH, HS-26CT32EH

#### **Die Characteristics**

#### DIE DIMENSIONS:

78 mils x 123 mils (1970µm x 3120µm)

(1970hiii x 3120hiii)

# INTERFACE MATERIALS:

#### Glassivation

Type: PSG (Phosphorus Silicon Glass Thickness: 10kÅ ±1kÅ

#### Top Metailiza

M1: Mo/Tiw Thickness: 5800Å M2: Al/Si/Cu Thickness: 10kÅ ±1kÅ

#### Substrate:

AVLSI1RA

#### **Backside Finish:**

Silicon

#### ASSEMBLY RELATED INFORMATION:

#### Substrate Potential:

V<sub>DD</sub> (When Powered Up)

#### ADDITIONAL INFORMATION:

Worst Case Current Density:

#### <2.0 x 10<sup>5</sup>A/cm<sup>2</sup>

nsistor Co

#### 240 Bond Pad Size:

110µm x 100µm

# TO:

HS-26CT32RH, HS-26CT32EH

# Die Characteristics

#### DIE DIMENSIONS

78 mils x 123 mils x 19mils ±1mil (1981µm x 3124µm x 483µm ±25µm)

#### INTERFACE MATERIALS:

#### Glassivation:

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization:

M1: Mo/TiW (Bottom)
Thickness: 5800Å ±1kÅ
M2: Al/Si/Cu (Top)
Thickness: 10kÅ ±1kÅ

#### Substrate

AVLSI1RA

#### Backside Finisl

Silicon

#### ASSEMBLY RELATED INFORMATION:

#### Substrate Potential (Powered Up):

Internally tied to V<sub>DD</sub>

#### **Worst Case Current Density:**

< 2.0e5 A/cm<sup>2</sup>

#### **Bond Pad Size:**

110µm x 100µm

Transistor Count: 315

# Datasheet changes for HS0-26CT31

# FROM:

HS-26CT31RH, HS-26CT31EH

# Die Characteristics

#### DIE DIMENSIONS:

96.5 milx195 milsx21 mils (2450x4950)

#### INTERFACE MATERIALS:

#### Glassivatio

Type: PSG (Phosphorus Silicon Glass) Thickness: 10kÅ ± 1kÅ

#### Metallization: M1: Mo/TiW

Thickness: 5800Å M2: Al/Si/Cu (Top) Thickness: 10kÅ ±1kÅ

#### Substrate:

AVLSI1RA

#### Backside Finis

Silicon

# ASSEMBLY RELATED INFORMATION:

#### Substrate Potential (Powered Up):

 $V_{DD}$ 

### ADDITIONAL INFORMATION:

#### **Worst Case Current Density**

<2.0x10<sup>5</sup>A/cm<sup>2</sup>

#### Bond Pad Size:

110µmx100µm

# TO:

HS-26CT31RH, HS-26CT31EH

# **Die Characteristics**

# DIE DIMENSIONS:

96.5 mils x 195 mils x 19 mils ±1mil 2451µm x 4953µm x 483µm ±25µm

# INTERFACE MATERIALS:

#### Glassivation

Type: PSG (Phosphorus Silicon Glass) Thickness: 8kÅ ±1kÅ

#### Metallization

M1: Mo/TiW (Bottom)
Thickness: 5800Å ±1kÅ
M2: Al/Si/Cu (Top)
Thickness: 10kÅ ±1kÅ

#### Substrate: AVLSI1RA

ackside Finis

# ASSEMBLY RELATED INFORMATION:

Substrate Potential (Powered Up):

Internally tied to V<sub>DI</sub>

### ADDITIONAL INFORMATION:

Worst Case Current Density:  $<2.0x10^5 A/cm^2$ 

# Bond Pad Size:

110µmx100µm



Summary

SMD#	Renesas Part#	Die Dimension		Glassivation type/thickness		M1 Thickness		M2 Thickness	
		OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
5962F9568901V9A	HS0-26C32RH-Q	Datasheet=78 x 123 x 21 mils SMD=78 x 123 x 21 mils	78 x 123 x <b>19mils</b> +/-1mil	SiO2 10kA +/-1kA	PSG 8kA +/-1kA	5800A	5800A <b>+/-1kA</b>	5800A	10kA +/-1kA
N/A	HS0-26C32RH/SAMPLE								
5962F9568903V9A	HS0-26C32EH-Q								
5962F9666302V9A	HS0-26CLV31RH-Q	Datasheet=96.5 x 195 x 21 mils SMD=96.5 x 195 x 21 mils	96.5 x 195 x <b>19 mils</b> +/-1mil	No Charde	No Change	MoChange	NoChange	MoChange	NoChange
5962F9666304V9A	HS0-26CLV31EH-Q								
N/A	HSO-26CLV31RH/SAMPLE								
5962F9568902V9A	HS0-26CLV32RH-Q	Datasheet=78 x 123 x <b>21</b> mils SMD=78 x 123 x <b>21</b> mils	78 x 123 x <b>19 mils</b> +/-1mil	No Change	No Change	NO Change	No Charge	NO Charge	<b>No Change</b>
N/A	HS0-26CLV32RH/SAMPLE								
5962F9568904V9A	HS0-26CLV32EH-Q								
5962F9563101V9A	HS0-26CT32RH-Q	Datasheet=78 x 123 x 21 mils SMD=78 x 123 x 21 mils	78 x 123 x <b>19mils</b> +/-1mil	PSG <b>10kA</b> +/-1kA	PSG 8kA +/-1kA	5800A	5800A <b>+/-1kA</b>	<b>N</b> OCharge	MoCharge
N/A	HS0-26CT32RH/SAMPLE								
5962F9563102V9A	HS0-26CT32EH-Q	31VID=78 X 123 X 21 IIIIIS							
5962F9563201V9A	HS0-26CT31RH-Q	Datasheet=96.5 x 195 x 21 mils	96.5 x 195 x 19 mils +/-1mil	PSG 10kA +/-1kA	PSG 8kA +/-1kA	5800A	5800A +/-1kA	No Change	No Change
N/A	HS0-26C31RH/SAMPLE	Datasheet=96.5 x 195 x 21 mils SMD=96.5 x 195 x 21 mils	96.5 x 195 x <b>19 mils</b> +/-1mil	PSG <b>10kA</b> +/-1kA	PSG 8kA +/-1kA	5800A	5800A <b>+/-1kA</b>	MoChange	NoCharge
5962F9666301V9A	HS0-26C31RH-Q								
5962F9666303V9A	HS0-26C31EH-Q								