

## **Thermal Print Heads**

## New products

Type: LHE-SU/BHE-SU/BVE-SU/BHP-FU/LHP-SU

[Light] series supports low- to medium-speed printing for label printers, etc.

BHC-SR/BHC-SE/BVC-SE/BHC-HE

[Slim] series small and compact new end-face head

**AHP-HS/AHP-WS** 

[SESTRO] series high ESD characteristics

**DHP-SU/GHP-SS** 

"V" series highly versatile for circuit design and heat history control with no heat

history control

**DHP-VS** 

"V" series highly versatile for circuit design and heat history control with heat history

control

Issue date: July 2011

<sup>•</sup> All specifications are subject to change without notice.

<sup>•</sup> Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.



## LHE4250SU

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- No heat history control type

## **APPLICATIONS**

- · Barcode and label printers
- · Ticket-vending machines
- · POS terminals

## PRODUCT SPECIFICATIONS

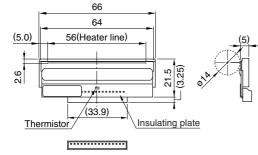
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	448
Dot density	(dots/mm)	8
	(DPI)	203
Length of heating element array (effective)	(mm)	56
Heating element average resistance	(Ω)	960
Glaze type		Partial glaze

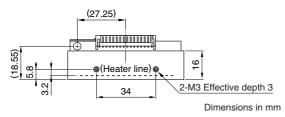
## **DRIVE CONDITIONS**

Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5

## **SHAPES AND DIMENSIONS**



Connector S16B-PH-K-S(LF)(SN)(JST)





## BHE4269SU

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Barcode and label printers
- Ticket-vending machines
- · POS terminals

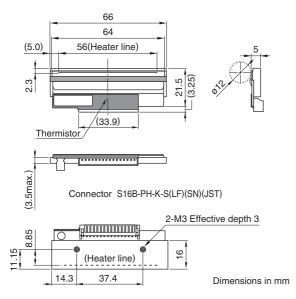
## PRODUCT SPECIFICATIONS

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	448
Dot density	(dots/mm)	8
	(DPI)	203
Length of heating element array (effective)	(mm)	56
Heating element average resistance	(Ω)	960

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	14(10 to 14)max.
Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5



## DHP4353SU

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- New-BP protective layer with excellent abrasion resistance is used.

#### **APPLICATIONS**

- · Barcode and label printers
- · Ticket-vending machines
- POS terminals

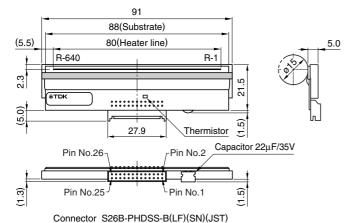
## PRODUCT SPECIFICATIONS

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	640
Det density	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	80
Heating element average resistance	(Ω)	800

## **DRIVE CONDITIONS**

Driver power supply(V)	Data transfer frequency(MHz)
4.5 to 5.5	16max.
3.0 to 3.6	10max.



<sup>•</sup> All specifications are subject to change without notice.

# **Thermal Print Heads For Large Format Printers**

## LHP4A04SU

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- Can be used for large format printers
- · No heat history control type

## **APPLICATIONS**

· Large format printers

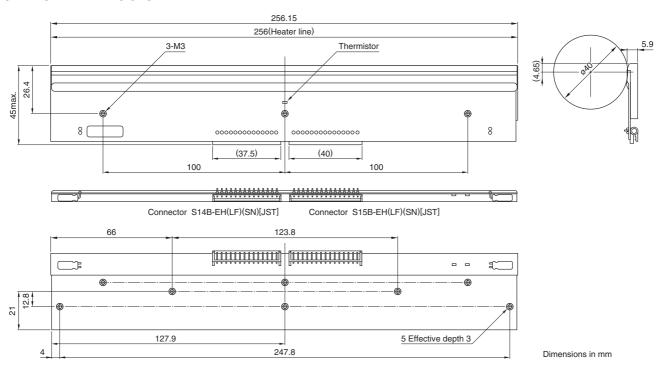
## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	2048
Dot density	(dots/mm)	8
	(DPI)	203
Length of heating element array (effective)	(mm)	256
Heating element average resistance	(Ω)	2400

## **DRIVE CONDITIONS**

Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5



<sup>•</sup> All specifications are subject to change without notice.

## **Thermal Print Heads For Cards and Hard Media**

## **BVE5216SU**

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- No heat history control type

## **APPLICATIONS**

- · Card printers
- · Printers for hard media

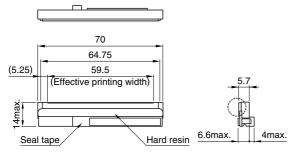
## **PRODUCT SPECIFICATIONS**

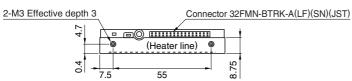
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	704
Dot density	(dots/mm)	11.8
	(DPI)	300
Length of heating element array (effective)	(mm)	59.5
Heating element average resistance	(Ω)	3000

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	16max.
Data transfer frequency	(MHz)	12max.
Driver power supply	(V)	3.3 or 5.0







## BHP6321FU

## **FEATURES**

- · Light series supporting low- to medium-speed printing
- High-speed type with five-stage LATCH heat history control
- New-BP protective layer with excellent abrasion resistance is used.

#### **APPLICATIONS**

- Barcode and label printers
- · Ticket-vending machines
- POS terminals

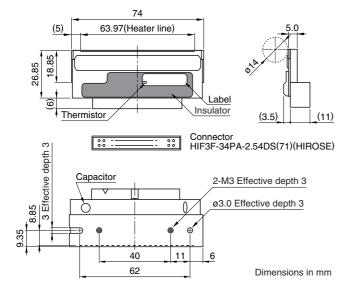
## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	768
Dat danait.	(dots/mm)	12
Dot density	(DPI)	305
Length of heating element array (effective)	(mm)	63.97
Heating element average resistance	(Ω)	1500
Glaze type		Partial glaze

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø14max.
Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5



## BHC4286SE

## **FEATURES**

- Normal type with no heat history control type [SS type]
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- Ticket-vending machines
- · POS terminals

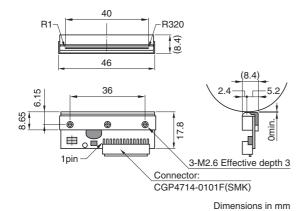
## PRODUCT SPECIFICATIONS

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	320
Dot density	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	40
Heating element average resistance	(Ω)	800

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	5max.
Driver power supply	(V)	4.5 to 5.5



<sup>•</sup> All specifications are subject to change without notice.

## BHC4267SR

## **FEATURES**

- · Slim series with a light and compact end-face head
- · No heat history control type
- · Straight path
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Printers with a card reader/writer installed
- · Rewrite printers
- Other thermal printers which require a straight path

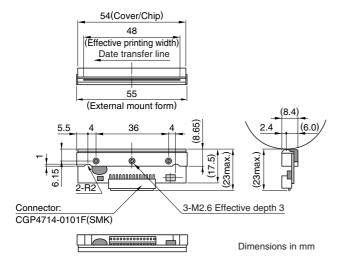
## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dota)	384
number of fleating elements	(dots)	304
Dot density	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	48
Heating element average resistance	(Ω)	1150

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	Option
Data transfer frequency	(MHz)	5max.
Driver power supply	(V)	4.5 to 5.5



## BHC4270SE

## **FEATURES**

- · Slim series with a light and compact end-face head
- · No heat history control type
- · Straight path
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Printers with a card reader/writer installed
- · Rewrite printers
- Other thermal printers which require a straight path

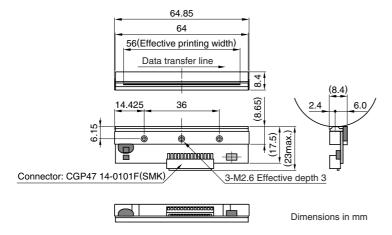
## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	448
Dot density	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	56
Heating element average resistance	(Ω)	970

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	Option
Data transfer frequency	(MHz)	5max.
Driver power supply	(V)	4.5 to 5.5





## BHC5214SE

## **FEATURES**

- · Slim series with a light and compact end-face head
- · No heat history control type
- · Straight path
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Printers with a card reader/writer installed
- · Rewrite printers
- Other thermal printers which require a straight path

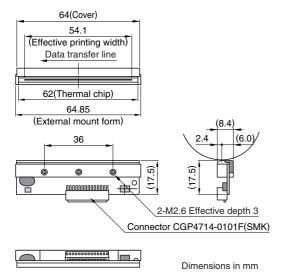
## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	640
Trainber of fleating clements	` '	
Dot density	(dots/mm)	11.8
Dot density	(DPI)	300
Length of heating element array (effective)	(mm)	54.1
Heating element average resistance	(Ω)	1500

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	Option
Data transfer frequency	(MHz)	10max.
Driver power supply	(V)	4.5 to 5.5







## BVC5215SE

## **FEATURES**

- · Slim series with a light and compact end-face head
- · No heat history control type
- · Straight path
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Printers with a card reader/writer installed
- · Rewrite printers
- Other thermal printers which require a straight path

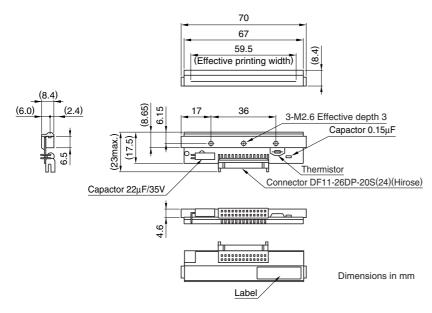


## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	704
Dot donoity	(dots/mm)	11.8
Dot density	(DPI)	300
Length of heating element array (effective)	(mm)	59.5
Heating element average resistance	(Ω)	3000

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	Option
Data transfer frequency	(MHz)	10max./16max.
Driver power supply	(V)	3.0 to 3.6/4.5 to 5.5







## BHC6224HE

## **FEATURES**

- · Slim series with a light and compact end-face head
- High-speed type with three-stage LATCH heat history control [HS type]
- · Straight path
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Printers with a card reader/writer installed
- · Rewrite printers
- Other thermal printers which require a straight path

## **PRODUCT SPECIFICATIONS**

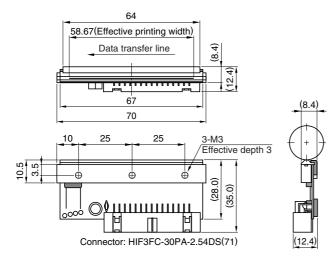
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	704
Dot density	(dots/mm)	12
Dot density	(DPI)	305
Length of heating element array (effective)	(mm)	58.67
Heating element average resistance	(Ω)	1500

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5

## **SHAPES AND DIMENSIONS**



Dimensions in mm

<sup>•</sup> All specifications are subject to change without notice.

## AHP4354HS

## **FEATURES**

- SESTRO series has achieved with high-level ESD characteristics.
- High-speed type with three-stage LATCH heat history control [HS type]
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- · Ticket-vending machines
- POS terminals

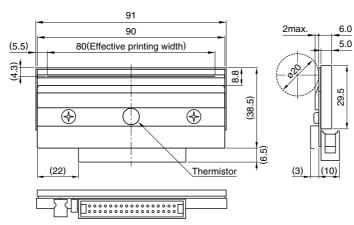
## PRODUCT SPECIFICATIONS

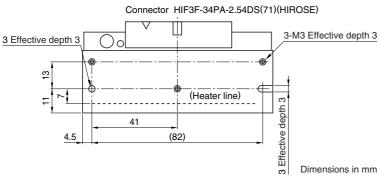
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	640
Dat danait:	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	80
Heating element average resistance	$(\Omega)$	800
Glaze type		Partial glaze

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5









## **AHP4356WS**

## **FEATURES**

- SESTRO series has achieved with high-level ESD characteristics.
- WS type supporting binary data input for two-color printing
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- · Ticket-vending machines
- · POS terminals

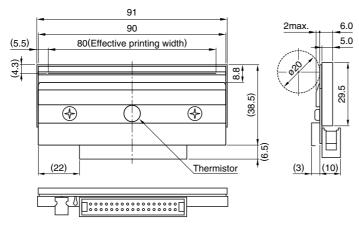
## PRODUCT SPECIFICATIONS

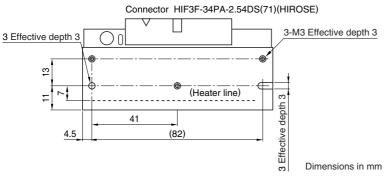
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	640
Dat dansity	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	80
Heating element average resistance	ce(Ω)	800
Glaze type		Partial glaze

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	8max.
Driver power supply	(V)	4.5 to 5.5









## **GHP4478SS**

#### **FEATURES**

- "Preference" Series3.3V or 5.0V power supply circuit can be selected.
- Normal type with no heat history control type [SS type]
- New-BP protective layer with excellent abrasion resistance is used.
- "SESTRO" Series has achieved high ESD characteristics.



#### **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- · Ticket-vending machines
- POS terminals

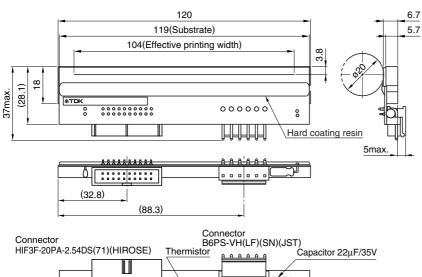
## **PRODUCT SPECIFICATIONS**

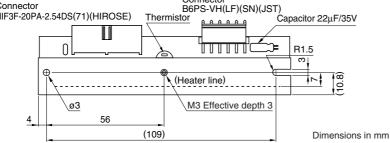
## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	832
Dot density	(dots/mm)	8
Dot density	(DPI)	203
Length of heating element array (effective)	(mm)	104
Heating element average resistance	$(\Omega)$	800
Glaze type		Partial glaze

## **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	12max.
Driver power supply	(V)	3.3 or 5





<sup>•</sup> All specifications are subject to change without notice.

## **GHP5411SS**

## **FEATURES**

- "Preference" Series3.3V or 5.0V power supply circuit can be selected.
- Normal type with no heat history control type [SS type]
- New-BP protective layer with excellent abrasion resistance is used.
- "SESTRO" Series has achieved high ESD characteristics.



## **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- Ticket-vending machines
- · POS terminals

## PRODUCT SPECIFICATIONS

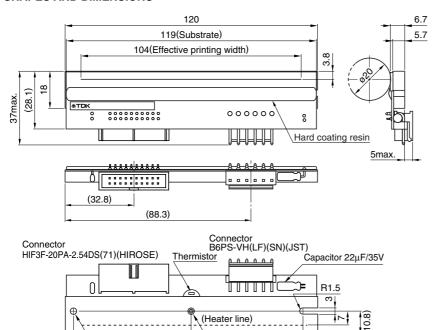
#### HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	1280
D. 1	(dots/mm)	11.8
Dot density	(DPI)	301
Length of heating element array (effective)	(mm)	108.16
Heating element average resistance	(Ω)	1500
Glaze type		Partial glaze

#### **DRIVE CONDITIONS**

Applied platen diameter	(mm)	ø20max.
Data transfer frequency	(MHz)	12max.
Driver power supply	(V)	3.3 or 5

## **SHAPES AND DIMENSIONS**



M3 Effective depth 3

Dimensions in mm

56

(109)

ø3

<sup>•</sup> All specifications are subject to change without notice.



## **DHP6519VS**

## **FEATURES**

- "Preference" Series3.3V or 5.0V power supply circuit can be selected.
- Three-stage or five-stage LATCH heat history control can be selected [VS type].
- New-BP protective layer with excellent abrasion resistance is used.

## **APPLICATIONS**

- · Barcode and label printers
- Bank ATMs
- Amusements
- · Ticket-vending machines
- · POS terminals

## **PRODUCT SPECIFICATIONS**

## HEATING ELEMENT SPECIFICATIONS

Number of heating elements	(dots)	1536
Dot density	(dots/mm)	12
Dot density	(DPI)	305
Length of heating element array (effective)	(mm)	128
Heating element average resistance	(Ω)	1300
Glaze type		Partial glaze

## **DRIVE CONDITIONS**

Driver power supply(V)	Data transfer frequency(MHz)
4.5 to 5.5	20max.
3.0 to 3.6	16max.

