



Modules

Thermal Printheads

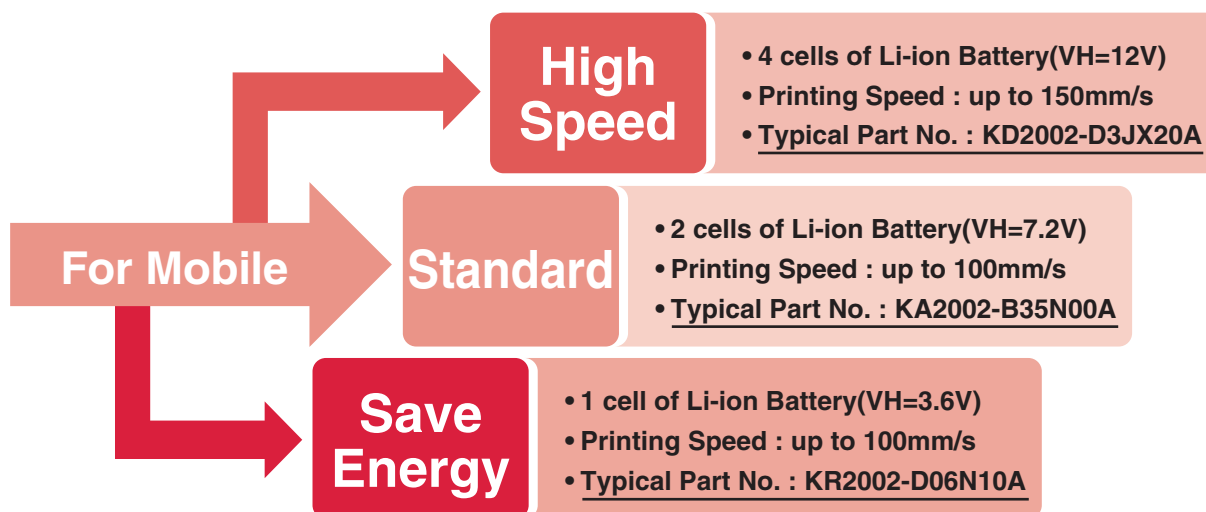
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Introduction of ROHM Thermal Printheads

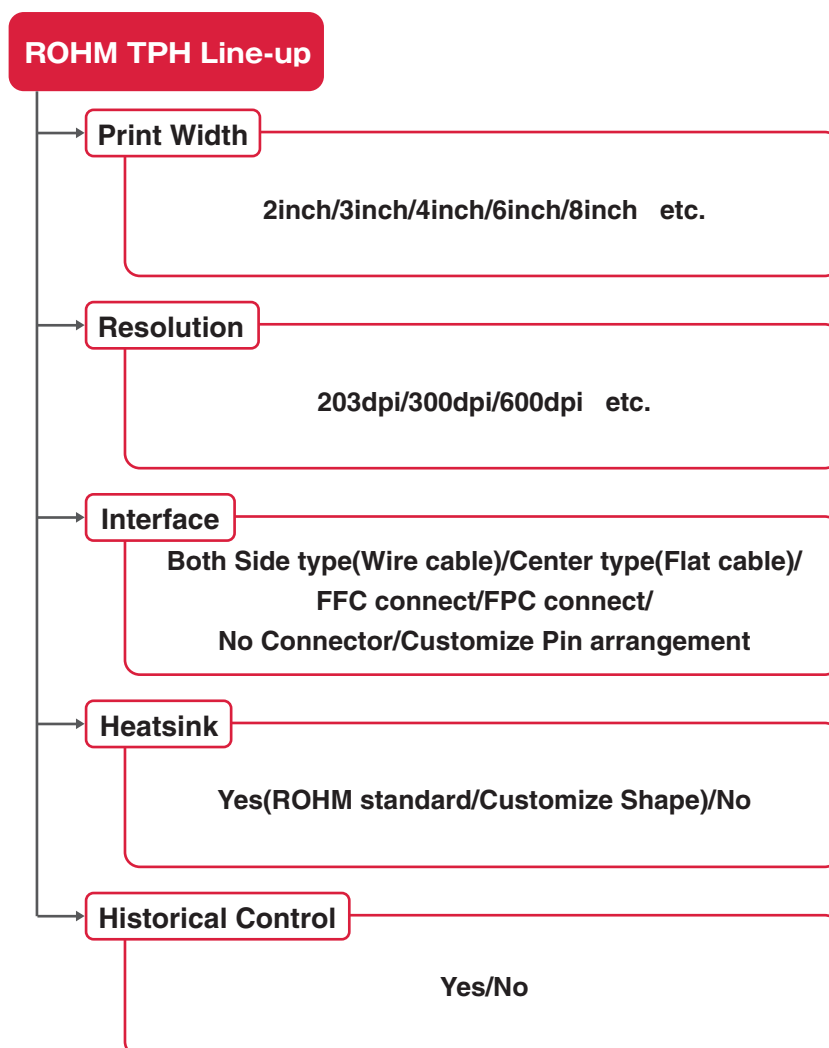
Propose various applications from ROHM wide line-up

1. New Thermal Printhead for saving energy and high speed printing.



From traditional 7.2V drive, the customer need diversification of applications.
ROHM is developing in order to response these requests.

2. ROHM wide line-up



We have various line-up to response the customer requests.
Please contact a ROHM sales representative for further details when there is no product on our line-up.

Part No. Configuration

Totally 13 digit

K	D	2	0	0	4	—	D	1	F	W	0	0	A
Structure of TPH Ex.)						Resolution Ex.)		Print Width Ex.)		Option Ex.)		Discrimination Number	
KA	Thick-film, All glaze					10	100dpi	01	1inch	DA	Both side type with Heatsink		
KD	Thick-film, Partial glaze					15	150dpi	02	2inch	D1	Both side type without Heatsink		
AE	Thin-film, Partial glaze					18	180dpi	03	3inch	etc.			
etc.						20	203dpi	04	4inch				
						30	300dpi	05	5inch				
						36	360dpi	06	6inch				
						60	600dpi	08	8inch				
								10	10inch				

Totally 11 digit

K	D	2	0	0	4	—	D	F	1	0	A								
Structure of TPH Ex.)						Resolution Ex.)		Print Width Ex.)		Option Ex.)		Discrimination Number							
KA	Thick-film, All glaze					10	100dpi	01	1inch	DF	Both side type with Heatsink								
KD	Thick-film, Partial glaze					15	150dpi	02	2inch	DG	Center type with Heatsink								
AE	Thin-film, Partial glaze					18	180dpi	03	3inch	etc.									
etc.						20	203dpi	04	4inch										
						30	300dpi	05	5inch										
						36	360dpi	06	6inch										
						60	600dpi	08	8inch										
								10	10inch										

For Facsimiles : A series


A series

■Features

In-house IC is mounted on ROHM printheads for A4 facsimiles, contributing to a reduction in the size and weight of printers. It enjoys wide use due to their high productivity, basic structure and reliable performance.

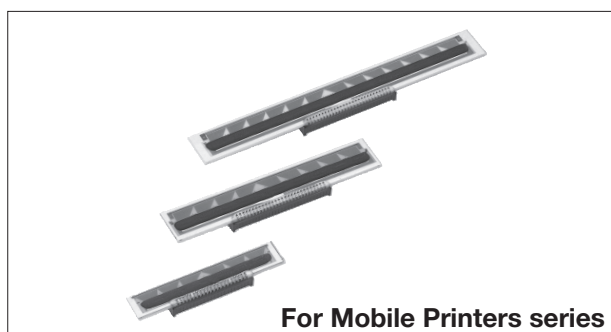
■Applications

Facsimiles of all types, from personal to business. Also ideal for ECGs and other medical imaging equipment due to particle-free printing.

For Facsimiles : A series

Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (V _{cc})	Heat Sink	Interface
KA2008-AF10A	203	216	1,728	3,000	20.0	6.25 to 12.5	24	3.13 to 5.25	Yes	9pin x 2 Both-side type (Wire cable)

For Mobile Printers series


For Mobile Printers series

■Features

3.6V Li-ion battery driving model and 150mm/s high speed printing model are added to line-up.

ROHM develops the products in order to respond to the diversification of product.

■Applications

Ideal for mobile printers, with low voltage and current capacity limitations, and EFT-POS terminals, receipt printers and compact label printers, where small size and low energy consumption are important requirements.

For Mobile Printers series

Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	
KR2002-D06N10A	203	48	384	80	8.0	100	3.6	2.7 to 5.25	—	21pin Non connector (Pre-soldering)	
KA2002-FB20A				176			14.0			7.2	21pin Center type (Flat cable)
KA2002-B35N00A											
KA2003-B35N00A											
KA2002-BE13A		48	384								
KA2003-BE51A		72	576		28pin Center type (Flat cable)						
KA2004-BE51A		104	832								
KA2004-D35N90A		104	832								
KA3002-B05N00A	300	48.8	576	8.0	75	12.0	21pin Non connector (Pre-soldering)				
KA2002-D35N20A	203	48	384	210	14.0		100	21pin Center type (Flat cable)			
KA2003-D35N20A		72	576								
KD2002-D3JX20A		48	384								
KD2003-D3JX20A		72	576								
KD2002-D5JX20A		56	448	20.0	150		28pin Center type (Flat cable)				
KD2003-D5JX20A		80	640								
KD2004-D5JX20A		104	832								

We can also develop a thermal printhead per customized specifications. Please contact a ROHM sales representative for further details.

For Gaming Equipment, ATMs : CF/CA, CG/LE series



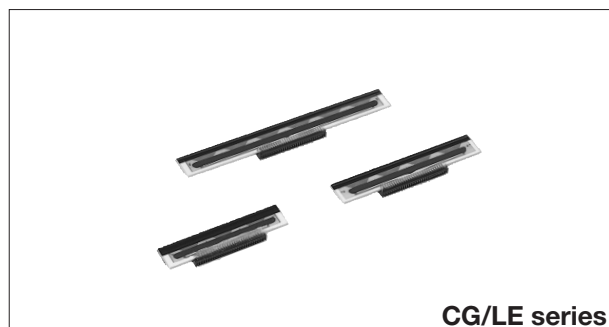
CF/CA series

■Features

Adopting the most suitable structures of the heat elements such as CF/CA series for 100mm/s high speed printing, CG series for 150mm/s make the high quality printings and energy-savings possible. Plus, those thermal print heads are able to cover various controls by adopting the high-frequency clock.

■Applications

High versatility makes these products ideal for POS terminals, ATMs, gaming, lottery printers, and the like.



CG/LE series

CF/CA series

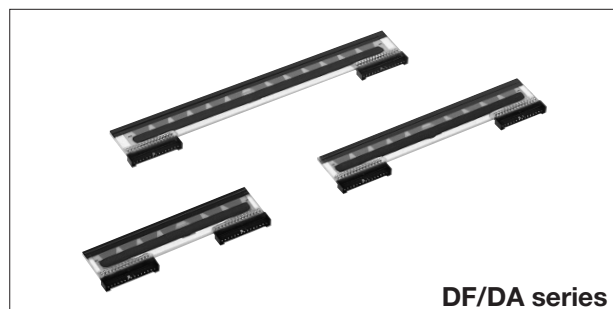
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (V _{cc})	Heat Sink	Interface
KD2002-CAFW00A	203	54	432	800	14.0	150	24	3.13 to 5.25	Yes	7pin×2, Both-side type (Wire cable)
KD2003-CAFW00A		72	576						Yes	9pin×2, Both-side type (Wire cable)
KD2004-CAFW00A		108	864						Yes	
New KD2004-C1GW00A		108	864						—	
New KD2004-CAGW00A		108	864						Yes	
KD2008-CF10A	203	216	1,728	1,000	20.0	100	24	3.13 to 5.25	Yes	15pin×2, Both-side type (Wire cable)
KD2008-CF16A		216	1,728	800		125			Yes	
KD3008-CF10A	300	219.5	2,592	1,250		100			Yes	

CG/LE series

CG22 Series										
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface
KD2002-CG11A	203	54	432	800	20.0	150	24	3.13 to 5.25	Yes	28pin Center type (Flat cable)
KD2003-CG11A		72	576		12.0			Yes		
KD2003-CG22A		72	576					Yes		
KD2003-CE22A		72	576					—		
KD2004-CG11A		108	864					20.0	3.13 to 5.25	
KD2008-CG50A		216	1,728		4.75 to 5.25				Yes	
KD3003-LEGW00A	300	73.2	864	1,000	125	24	4.75 to 5.25	Yes		

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For POS Terminals : DF/DA, DE/KE series

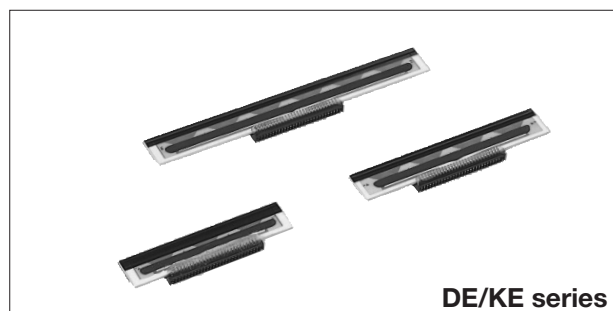

DF/DA series

■Features

The original heat element structure enables dark printing from the get go with minimal smearing at the end for optimum print quality, even at high 100 to 250mm/s printing speeds.

■Applications










Ideal for POS and ECR printers that support high-speed printing (6 to 10ips) and compact label printers.


DE/KE series

DF/DA series

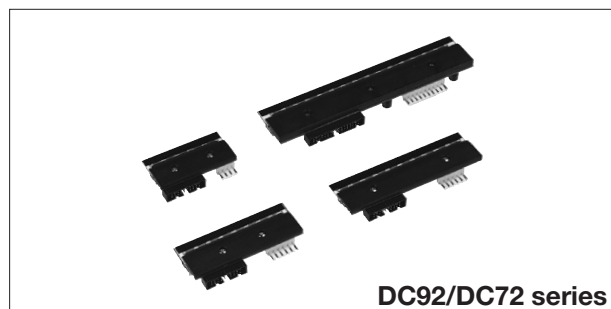
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (V _{CC})	Heat Sink	Interface
KD2002-DAFW00A	203	56	448	650	20.0	250	24	3.13 to 5.25	Yes	15pin×2, Both-side type (Wire cable)
KD2003-DAFW00A		80	640						Yes	
KD2004-DAFW00A		104	832						Yes	
KD2004-D1GW00A									—	
KD2004-DAGW00A									Yes	
KD3002-DF11A	300	54.2	640	1,000	18.0	100		Yes		
KD3003-DF11A		81.3	960					Yes		
KD3004-DF11A		108.4	1,280					Yes		
KD3004-K1GW00A								—		
KD3008-DF54A		216.8	2,560	660	25.0			4.75 to 5.25	Yes	15pin×3, 3 points connector (Wire cable)

DE/KE series

PART NO.											
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	
KD2002-DEFW00A	203	56	448	650	20.0	250	24	3.13 to 5.25	Yes	28pin Center type (Flat cable)	
 KD2003-D0FW00A		80	640						—	28pin Non connector (Pre-soldering)	
 KD2003-D5FW00A									—	28pin Center type (Flat cable)	
 KD2003-D5GW00A									—		
KD2003-DEFW00A					Yes						
 KD2003-DEGW00A					Yes						
 KD2003-F0FW00A					14.0				—	28pin Non connector (Pre-soldering)	
 KD2003-F5FW00A		—	28pin Center type (Flat cable)								
 KD2003-F0GW00A		—	28pin Non connector (Pre-soldering)								
 KD2003-F5GW00A		—	28pin Center type (Flat cable)								
KD2004-DEFW00A	104	832	20.0	Yes	28pin Non connector(Pre-soldering)						
 KD2004-D0GW00A				—							
KD3003-KEFW00A				300	81.3	960	1,000	18.0	200	Yes	28pin Center type (Flat cable)

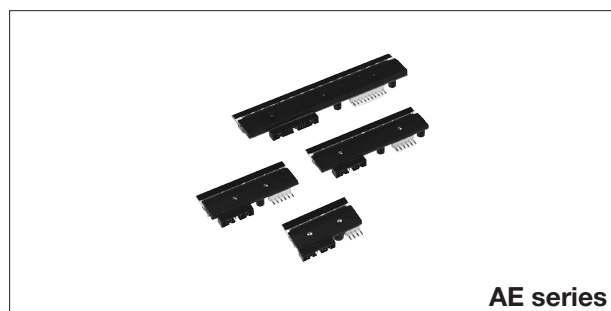
We can also develop a thermal printhead per customized specifications. Please contact a ROHM sales representative for further details.

For Ticket, Barcode Label Printers : DC92/DC72, AE series



■Features

ROHM's high-current thermal printheads, featuring a heat element structure compatible with high-speed printing along with a durable protective coating, enable high-speed printing with superior energy savings, providing superior reliability in industrial equipment. The heat history controls are equipped with DC72 which is ROHM's original and covers high speed printings of 12ips.



■Applications

Ideal for bar-code printers or label printers at factory lines or distribution centers where 24-hour operation or continuous printing are required.

DC92 series											
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	Historical Control
KD2002-DC92A	203	56	448	550	20.0	100 to 150	24	4.75 to 5.25	Yes	20pin connector, 4pin power connector (Wire cable)	—
KD2003-DC92A		80	640							20pin connector, 6pin power connector (Wire cable)	
KD2004-DC92A		104	832							34pin connector, 10pin power connector (Wire cable)	
KD2006-DC92A		168	1,344	650							
KD3002-DC92A	300	54.2	640	1,250		50 to 100				20pin connector, 4pin power connector (Wire cable)	
KD3003-DC92A		81.3	960							20pin connector, 6pin power connector (Wire cable)	
KD3004-DC92A		108.4	1,280							34pin connector, 10pin power connector (Wire cable)	
KD3006-DC92A		162.6	1,920								
DC72 series											
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	Historical Control
KD2002-DC72A	203	56	448	550	20.0	100 to 250	24	4.75 to 5.25	Yes	20pin connector 4pin power connector (Wire cable)	Yes
KD2003-DC72A		80	640							20pin connector 6pin power connector (Wire cable)	
KD2004-DC72A		104	832							34pin connector 10pin power connector (Wire cable)	
KD2006-DC72A		168	1,344	650							
KD3002-DC72A	300	54.2	640	1,250		100 to 200				20pin connector 4pin power connector (Wire cable)	
KD3003-DC72A		81.3	960							20pin connector 6pin power connector (Wire cable)	
KD3004-DC72A		108.4	1,280							34pin connector 10pin power connector (Wire cable)	
KD3006-DC72A		162.6	1,920	1,000							
AE series											
Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	Historical Control
AE2004-DC50A	203	112	896	800	20.0	150	24	4.75 to 5.25	Yes	26pin connector 6pin power connector (Wire cable)	—
AE3004-DC50A	300	108.4	1,280	1,250		100					

We can also develop a thermal printhead per customized specifications. Please contact a ROHM sales representative for further details.

For Packaging High-speed Printers : AH series



■Features

These thermal heads feature a near-edge structure based on the high-speed, high-quality, reliable step-free SE, SF series, enabling straight path for hard media or high speed printing.

■Applications

Ideal for packaging printers requiring high reliability.

For Packaging High-speed Printers : AH series

Part No.	Resolutions (dpi)	Print Width (mm)	Number of dot (dots)	Resistance Tolerance (Ω)	Platen Diameter Max. (mm)	Print Speed (mm/s)	Supply Voltage (VH)	Logic Voltage (Vcc)	Heat Sink	Interface	Historical Control
AH2001-DK50A	203	40	320	850	∞	62.5	12	4.75 to 5.25	Yes	15pin Center type (Wire cable)	—
AH2002-DC50A		56	448			83.3	24			20pin connector 4pin power connector (Wire cable)	
AH2004-DC50A		112	869			83.3				20pin connector 6pin power connector (Wire cable)	
AH3002-DC60A	300	54.2	640	200		20pin connector 4pin power connector (Wire cable)				Yes	
AH3004-DC50A		108.4	1,280	56.5		20pin connector 6pin power connector (Wire cable)				—	
AH3004-DC60A		108.4	1,280	200						Yes	

We can also develop a thermal printhead per customized specifications. Please contact a ROHM sales representative for further details.