

NO: RF-038
DATE: May 2016

PRODUCT: Select V680 RFID Tags
TYPE: Discontinuation Notice

Select V680 RFID Tags to be Discontinued

Discontinuation date: March 31, 2017

Affected Parts

Product discontinuation	Recommended replacement
V680-D8KF67	V680S-D8KF67
V680-D8KF67M	V680S-D8KF67M
V680-D8KF68	V680S-D8KF68
V680-D8KF68A	V680S-D8KF68
V680-D32KF68	No recommended replacement



Select V680 tags are being discontinued and, for most parts, are being replaced with V680S versions. For the replacements, data capacity is the same; however, there are dimensional characteristics and other variations between the discontinued part and replacement part.

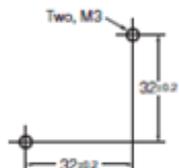
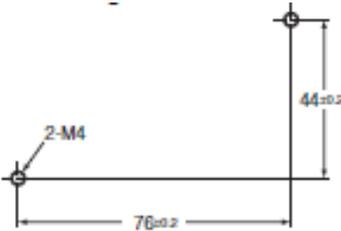
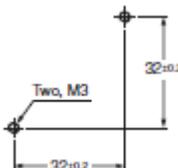
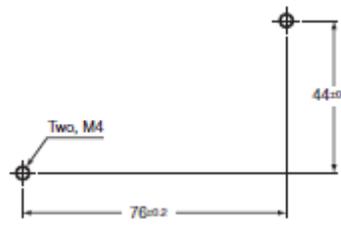
Detail of Differences

Body Color

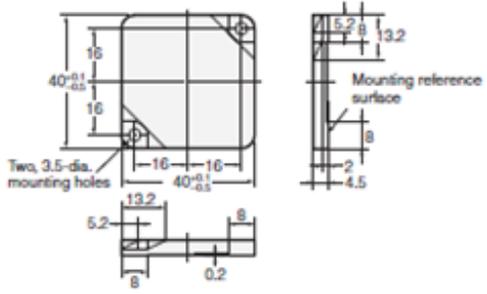
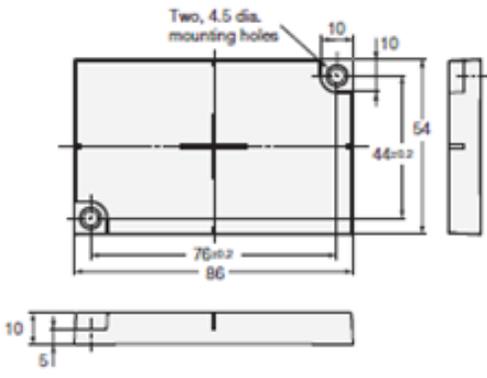
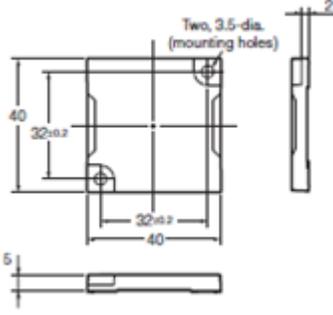
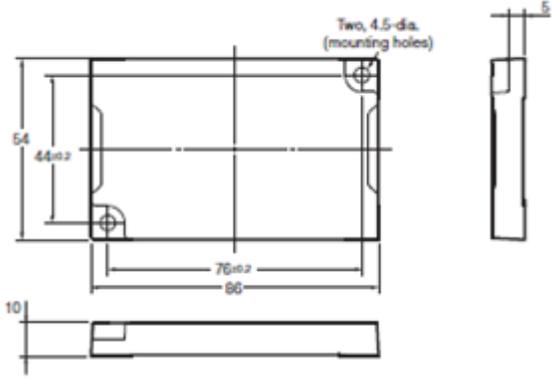
Product to be discontinued Model V680-D8KF*/-D32KF68	New Replacement Part Number Model V680S-D8KF*
Ivory V680-D8KF67(M)  V680-D8KF68(A)/-D32KF68 	Black V680S-D8KF67(M)  V680S-D8KF68 

Detail of Differences

Mounting Dimensions

Product to be discontinued Model V680-D8KF*/-D32KF68	New Replacement Part Number Model V680S-D8KF*
<p>Mounting Hole Dimensions V680-D8KF67(M)</p>  <p>V680-D8KF68(A)/-D32KF68</p> 	<p>Mounting Hole Dimensions V680S-D8KF67(M)</p>  <p>V680S-D8KF68</p> 

Dimensions

Product to be discontinued Model V680-D8KF*/-D32KF68	New Replacement Part Number Model V680S-D8KF*
<p>V680-D8KF67(M)</p>  <p>V680-D8KF68(A)/-D32KF68</p> 	<p>V680S-D8KF67(M)</p>  <p>V680S-D8KF68</p> 

Specifications

Item	Product to be discontinued Model V680-D8KF*/-D32KF68	New Replacement Part Number Model V680S-D8KF*
Memory capacity	V680-D8KF* : 8,192 bytes (user area) V680-D32KF68 : 32,744 bytes (user area)	8,192 bytes (user area)
Memory type	FRAM	FRAM
Data retention time	10 years after writing (70°C max.), 6 years after writing (85°C max.)	10 years after writing (85°C max.)
Write endurance **1	10 billion times per block. Access frequency : 10 billion times	1 trillion times per block. Access frequency : 1 trillion times
Ambient operating temperature	- 20 to 85°C (with no icing)	- 20 to 85°C (with no icing)
Ambient storage temperature	- 40 to 85°C (with no icing)	- 40 to 125°C (with no icing)
Ambient operating humidity	35 to 85%	35 to 85%
Degree of protection	IP67 (IEC60529:2001) Oil resistance equivalent to IP67G (JIS C 0920:2003, Appendix 1)**2	IP68 (IEC60529:2001)/ IPX9K (DIN 40 050) Oil resistance equivalent to IP67G (JIS C 0920:2003, Appendix 1)**2
Vibration resistance	V680-D8KF67(M) ; 10 to 2,000 Hz, 1.5-mm double amplitude at 150 m/s ² acceleration with 10 sweeps in X, Y, and Z directions for 15 minutes each V680-D8KF68(A)/-D32KF68 ; 10 to 500 Hz, 1.5-mm double amplitude at 100 m/s ² acceleration with 10 sweeps in X, Y, and Z directions for 11 minutes each	V680S-D8KF67(M) ; 10 to 2,000 Hz, 1.5-mm double amplitude at 150 m/s ² acceleration with 10 sweeps in X, Y, and Z directions for 15 minutes each V680S-D8KF68 ; 10 to 500 Hz, 1.5-mm double amplitude at 100 m/s ² acceleration with 10 sweeps in X, Y, and Z directions for 11 minutes each
Shock resistance	500 m/s ² in X, Y, and Z directions 3 times each (18 times in total)	500 m/s ² in X, Y, and Z directions 3 times each (18 times in total)
Appearance	V680-D8KF67(M) :40×40×4.5mm V680-D8KF68(A)/-D32KF68 :86×54×10mm	V680S-D8KF67(M) :40×40×5mm V680S-D8KF68 :86×54×10mm
Materials	Case: PBT resin Filling: Epoxy resin	PPS resin
Weight	V680-D8KF67 Approx. 8g V680-D8KF67M Approx. 8.5g V680-D8KF68 Approx. 50g V680-D8KF68A Approx. 50g V680-D32KF68 Approx. 50g	V680S-D8KF67 Approx. 11.5g V680S-D8KF67M Approx. 12g V680S-D8KF68 Approx. 44g
Metallic compatibility	V680-D8KF67 No V680-D8KF67M Yes V680-D8KF68 No V680-D8KF68A No V680-D32KF68 No	V680S-D8KF67 No V680S-D8KF67M Yes V680S-D8KF68 No

Product to be discontinued Model V680-D8KF*/-D32KF68	New Replacement Part Number Model V680S-D8KF*																																		
<p>Communications Time</p> <p>V680-HA63B, V680-HS□□, V680-D8KF□□, V680-D32KF□□</p> <table border="1"> <thead> <tr> <th>Communications speed setting</th> <th>Command</th> <th>Communications time N: No. of bytes processed</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Normal mode</td> <td>Read</td> <td>$T = 1.3 N + 30$</td> </tr> <tr> <td>Write (with verification)</td> <td>$T = 1.6 N + 59$</td> </tr> <tr> <td>Write (without verification)</td> <td>$T = 1.3 N + 50$</td> </tr> <tr> <td rowspan="3">High-speed mode (See note.)</td> <td>Read</td> <td>$T = 0.8 N + 25$</td> </tr> <tr> <td>Write (with verification)</td> <td>$T = 1.1 N + 41$</td> </tr> <tr> <td>Write (without verification)</td> <td>$T = 0.9 N + 40$</td> </tr> </tbody> </table> <p>Note: When using multi-access or FIFO communications options, normal-mode communications speed will be used regardless of the high-speed mode setting.</p> <p>Communications speed: Normal mode Communications speed: High-speed mode</p>	Communications speed setting	Command	Communications time N: No. of bytes processed	Normal mode	Read	$T = 1.3 N + 30$	Write (with verification)	$T = 1.6 N + 59$	Write (without verification)	$T = 1.3 N + 50$	High-speed mode (See note.)	Read	$T = 0.8 N + 25$	Write (with verification)	$T = 1.1 N + 41$	Write (without verification)	$T = 0.9 N + 40$	<p>Communications Time</p> <p>When the amount of data is little V680 is fast, and There are a lot of amounts of data V680S becomes speedy.</p> <p>V680-HA63B, V680-HS□□, V680S-D8KF□□</p> <table border="1"> <thead> <tr> <th>Communications speed setting</th> <th>Command</th> <th>Communications time N: No. of bytes processed</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Normal mode</td> <td>Read</td> <td>$T = 0.6 N + 47$</td> </tr> <tr> <td>Write (with verification)</td> <td>$T = 1.2 N + 128$</td> </tr> <tr> <td>Write (without verification)</td> <td>$T = 0.6 N + 101$</td> </tr> <tr> <td rowspan="3">High-speed mode (See note.)</td> <td>Read</td> <td>$T = 0.6 N + 47$</td> </tr> <tr> <td>Write (with verification)</td> <td>$T = 1.2 N + 128$</td> </tr> <tr> <td>Write (without verification)</td> <td>$T = 0.6 N + 101$</td> </tr> </tbody> </table> <p>Note: When using V680S-D8KF□□ RF Tags, the Normal Mode communications speed will be used even if the High-speed Mode is set.</p> <p>Communications speed: Normal mode Communications speed: High-speed mode</p>	Communications speed setting	Command	Communications time N: No. of bytes processed	Normal mode	Read	$T = 0.6 N + 47$	Write (with verification)	$T = 1.2 N + 128$	Write (without verification)	$T = 0.6 N + 101$	High-speed mode (See note.)	Read	$T = 0.6 N + 47$	Write (with verification)	$T = 1.2 N + 128$	Write (without verification)	$T = 0.6 N + 101$
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Tag Read/Write Distance

Amplifier	Antenna	Product to be discontinued Model V680-D8KF67		Replacement Part Number Model V680S-D8KF67 Read and Write
		Read	Write	
V680-HA63B	V680-HS52	0 to 17mm	0 to 17mm	0 to 17mm
	V680-HS63	7 to 30mm	7 to 30mm	7 to 30mm
	V680-HS65	0 to 42mm	0 to 42mm	0 to 42mm
V680-HAM42 V680-HAM81/91	V680-HS52	1 to 17mm	1 to 17mm	1 to 17mm
	V680-HS63	7 to 30mm	7 to 30mm	7 to 30mm
	V680-HS65	5 to 42mm	5 to 42mm	5 to 42mm
V680-H01-V2		0 to 100mm	0 to 100mm	0 to 100mm
V680-CH*D		Communicable	Communicable	Communicable

Amplifier	Antenna	Product to be discontinued Model V680-D8KF67M		Replacement Part Number Model V680S-D8KF67M Read and Write
		Read	Write	
V680-HA63B	V680-HS52	0 to 16mm	0 to 16mm	0 to 16mm
	V680-HS63	6 to 25mm	6 to 25mm	6 to 25mm
	V680-HS65	0 to 25mm	0 to 25mm	0 to 25mm
V680-HAM42 V680-HAM81/91	V680-HS52	1 to 16mm	1 to 16mm	1 to 16mm
	V680-HS63	6 to 25mm	6 to 25mm	6 to 25mm
	V680-HS65	5 to 25mm	5 to 25mm	5 to 25mm
V680-CH*D		Communicable	Communicable	Communicable

Amplifier	Antenna	Product discontinuation Model V680-D8KF68		Recommended replacement Model V680S-D8KF68 Read and Write
		Read	Write	
V680-HA63B	V680-HS63	0 to 45mm	0 to 45mm	0 to 45mm
	V680-HS65	0 to 75mm	0 to 75mm	0 to 75mm
V680-HAM42 V680-HAM81/91	V680-HS63	5 to 45mm	5 to 45mm	5 to 45mm
	V680-HS65	5 to 75mm	5 to 75mm	5 to 75mm
V680-H01-V2		0 to 150mm	0 to 150mm	0 to 150mm
V680-CH*D		Communicable	Communicable	Communicable

Amplifier	Antenna	Product discontinuation Model V680-D8KF68A		Recommended replacement Model V680S-D8KF68 Read and Write
		Read	Write	
V680S-HMD66-ETN		10 to 100mm	10 to 100mm	10 to 115mm
V680S-HMD64-ETN		7.5 to 75mm	7.5 to 75mm	7.5 to 75mm

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.