





Applicable standard												
Rating	Operating temperature range	-55°C to + 85°C (Note 1)					Storage temperature range	-10°C to + 60°C (Note 3)				
	Operating humidity range	20% to 80% (Note 2)					Storage humidity range	40% to 70% (Note 3)				
	Voltage	AC 1000V DC					Applicable connector	DF22B#-*S-7. 92C (%) DF22C#-*S-7. 92C (%) DF22#-*EP-7. 92C (%) *2 to 5				
	Current( * 1) 	CONTACT	AWG10	AWG12	AWG14	AWG16	Current( * 2)	CONTACT	AWG10	AWG12	AWG14	AWG16
	2	38A	32A	23A	21A		2	25A	20A	18A	15A	
	3	38A	32A	23A	21A		3	25A	20A	18A	15A	
	4	33A	26A	22A	19A		4	22A	18A	15A	13A	
	5	33A	26A	22A	19A		5	22A	18A	15A	13A	
Rated voltage		Rated current				Insulation group		IP-Protectio method				
UL		AC 600V		See above left (*1) (At ambient temp. 25°C) (Note 5)				—		—		
C-UL		AC 600V		See above right (*2) (Temp. rise up 30°C MAX)				—		—		
TUV		AC 600V		See above( * 1)				II		IPOO		
Specifications												
Item		Test method				Requirements				QT	AT	
Construction												
General examination		Visually and by measuring instrument.				According to drawing.				X	X	
Marking		Confirmed visually.								X	X	
Electric characteristics												
Insulation resistance		1000V DC.				1000MΩ MIN.				X	—	
Voltage proof		2500V AC for 1 min.				No flashover or breakdown.				X	—	
Mechanical characteristics												
Mechanical operation		30 times insertions and extractions.				No damage, crack or looseness of parts.				X	—	
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 2 h, for 3 directions.				No damage, crack or looseness of parts.				X	—	
Shock		490 m/s <sup>2</sup> duration of pulse 11 ms at 3 times for 3 directions.				No damage, crack or looseness of parts.				X	—	
Environmental characteristics												
Rapid change of temperature		Temperature -55→ 5 to 35→+85→ 5 to 35 °C Time 30→ 5 max → 30→ 5 max min Under 5 cycles.				① Insulation resistance: 1000MΩ MIN. ② No damage, crack or looseness of parts.				X	—	
Damp heat (Steady state)		Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.				① Insulation resistance: 500MΩ MIN. ② No damage, crack or looseness of parts.				X	—	
Remarks Note 1: Include the temperature rising by current. Note 2: No condensing Note 3: Apply to the condition of long term storage for unused products before mount on pcb, After mounted on pcb, operating temperature and humidity range is applied for interim storage during transportation.												
	Count	Description of revisions				Designed		Checked		Date		
	1	DIS-H-00002668				TS. KUMAZAWA		TS. FUKUSHIMA		17. 07. 08		
Unless otherwise specified , refer to IEC 60512.								Approved	KI. AKIYAMA		14. 09. 18	
								Checked	TS. FUKUSHIMA		14. 09. 17	
								Designed	HT. SATO		14. 09. 17	
								Drawn	MI. SAKIMURA		14. 09. 16	
Note QT: Qualification Test AT: Assurance Test X: Applicable Test						Drawing no.		ELC4-164777-01				
		Specification sheet				Part no.		DF22B/C-*RS/P-7. 92				
		Hirose electric co., ltd.				Code no.		CL680-			1/9	

(Note 4) Derating curve takes manufacturing tolerances into consideration as well as uncertainties in temperature measurement and the measuring set up and is derived from the basic curve multiplied by 0.8 calculation.

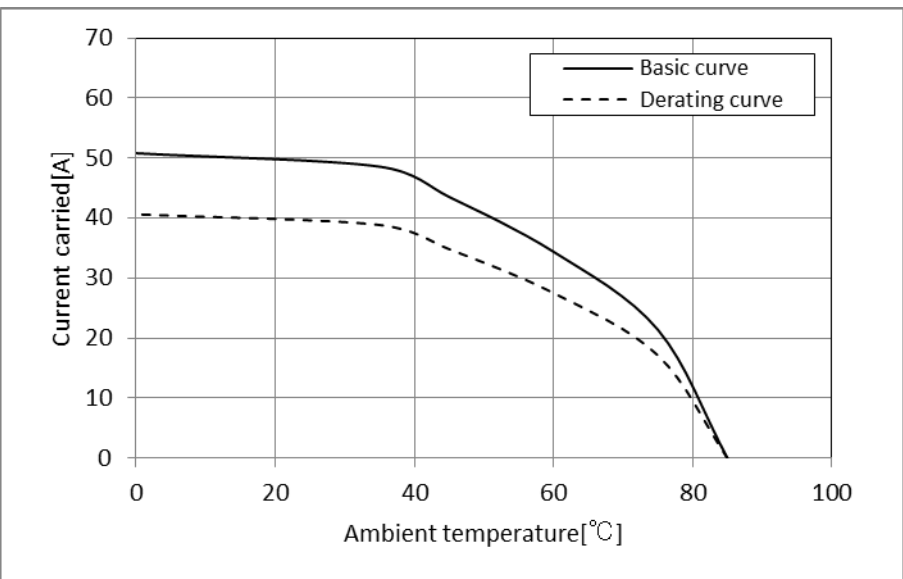
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

(Note 6) Measurement method of derating curve is shown below.

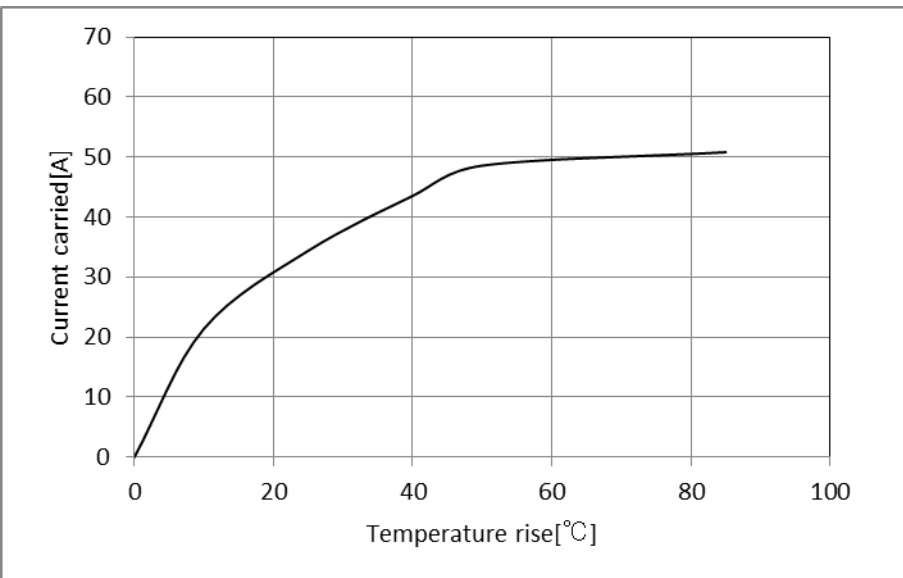
- Test specimen: Unused DF22-3P-7.92DS(05).  
Unused DF22-3S-7.92C(28)  
Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test

Drawing no.

ELC4-164777-01



Specification sheet

Part no.

DF22B/C-\*RS/P-7.92

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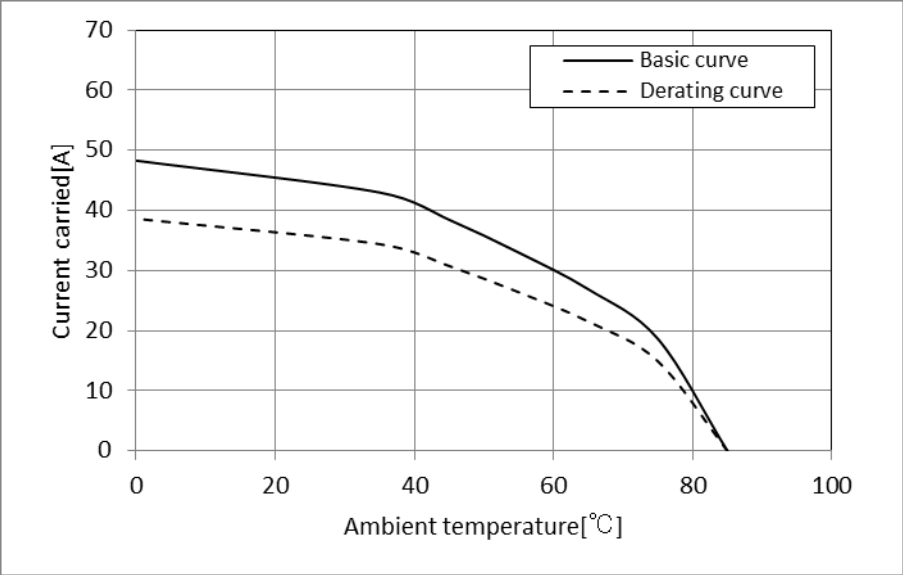


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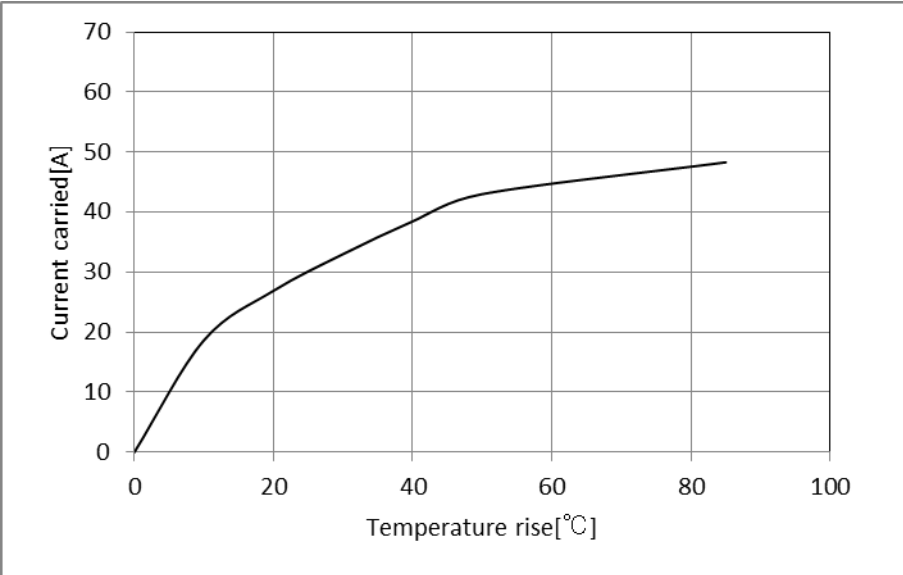
- (Note 7) Measurement method of derating curve is shown below.
- Test specimen:Unused DF22-5P-7.92DSA(05).  
Unused DF22-5S-7.92C(28)  
Unused DF22A-1012SCF
  - Test cable spec:AWG 10
  - Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20587)



[Reference]

Derating curve



Temperature rise curve



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	Specification sheet	Part no.	DF22B/C-*RS/P-7. 92			
	Hirose electric co., ltd.	Code no.	CL680-		3/9	

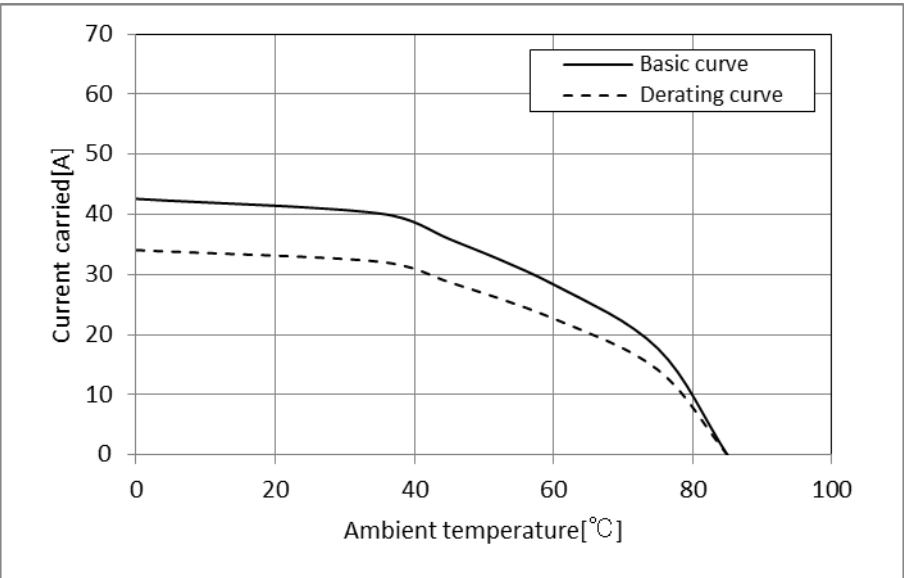
May.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.  
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

(Note 8) Measurement method of derating curve is shown below.

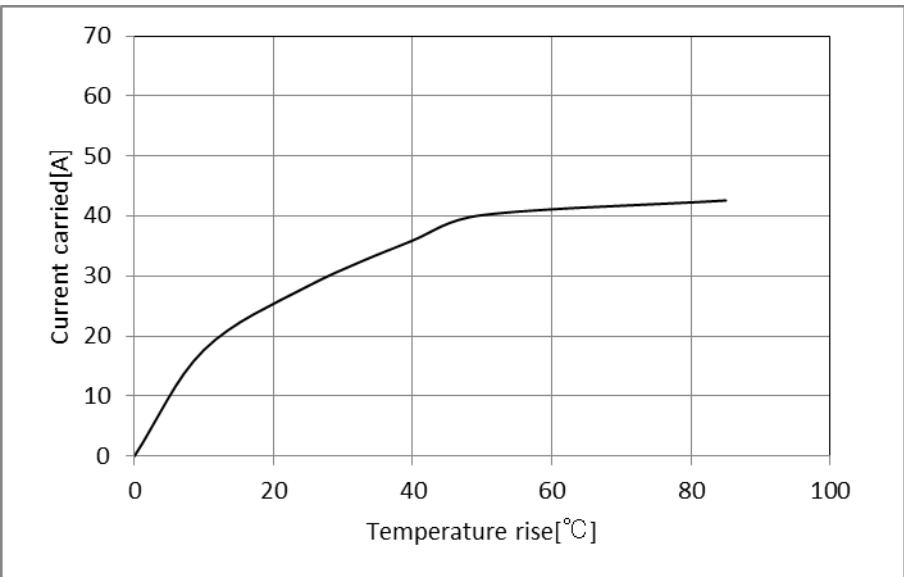
- Test specimen:Unused DF22-3P-7.92DS(05).  
Unused DF22-3S-7.92C(28)  
Unused DF22A-1012SCF
- Test cable spec:AWG 12
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)



[Reference]

Derating curve



Temperature rise curve



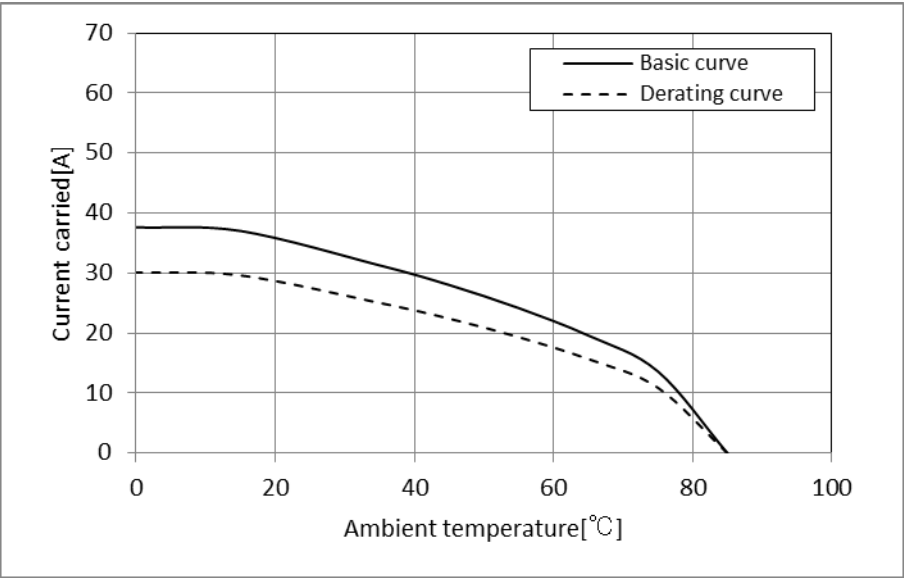
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC4-164777-01		
	Specification sheet		Part no.	DF22B/C-*RS/P-7. 92			
	Hirose electric co., Ltd.		Code no.	CL680-			4/9

(Note 9) Measurement method of derating curve is shown below.

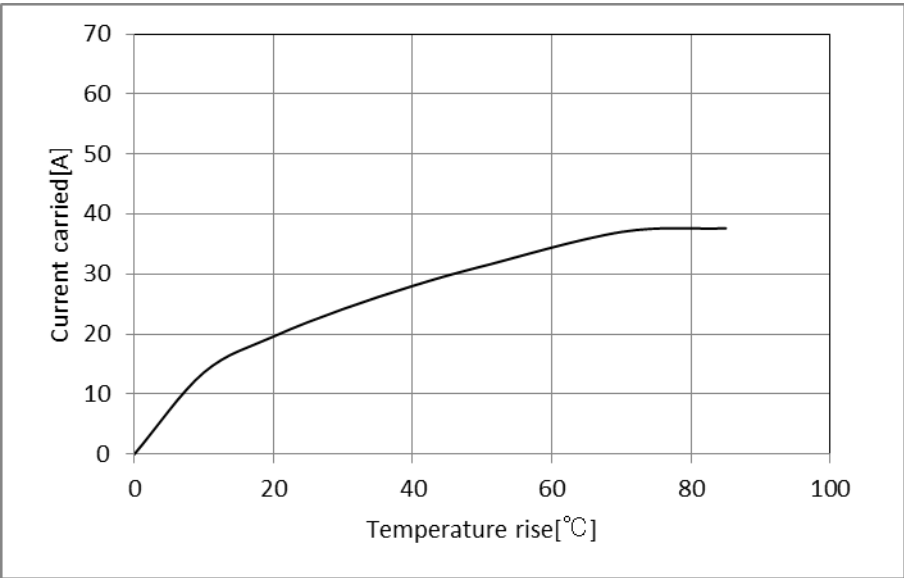
- Test specimen:Unused DF22-5P-7.92DSA(05).  
Unused DF22-5S-7.92C(28)  
Unused DF22A-1012SCF
- Test cable spec:AWG 12
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20810)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test

Drawing no.

ELC4-164777-01



Specification sheet

Part no.

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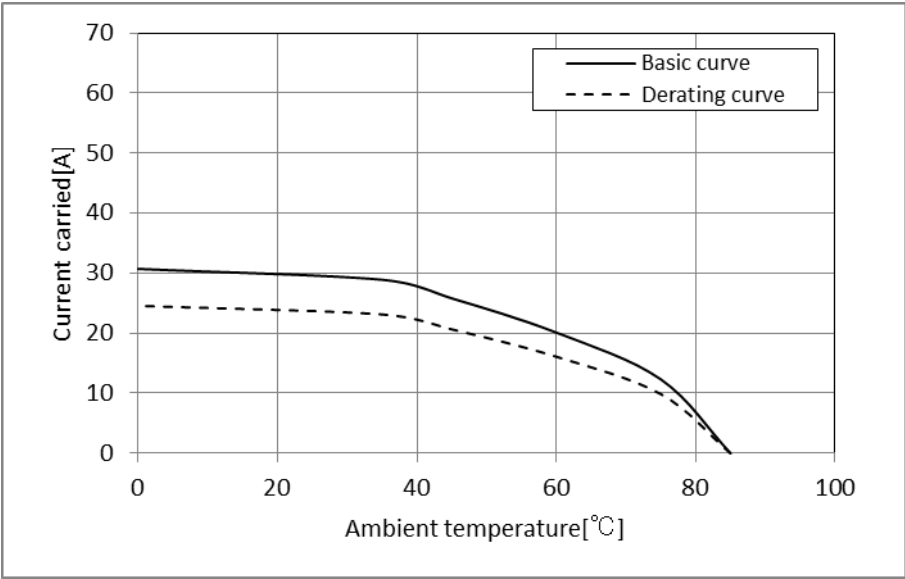
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(Note 10) Measurement method of derating curve is shown below.

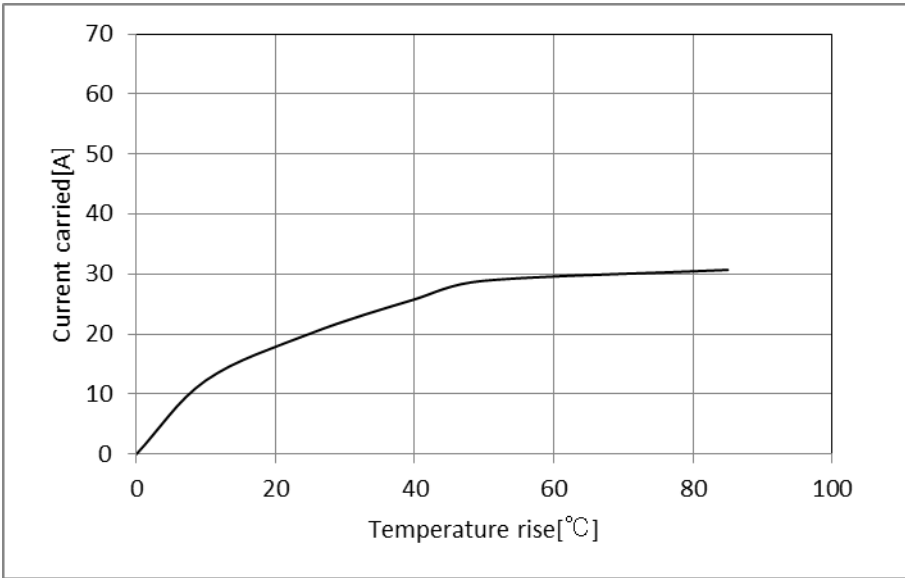
- Test specimen:Unused DF22-3P-7.92DS(05).  
Unused DF22-3S-7.92C(28)  
Unused DF22A-1416SCF
- Test cable spec:AWG 14
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test

Drawing no.

ELC4-164777-01



Specification sheet

Part no.

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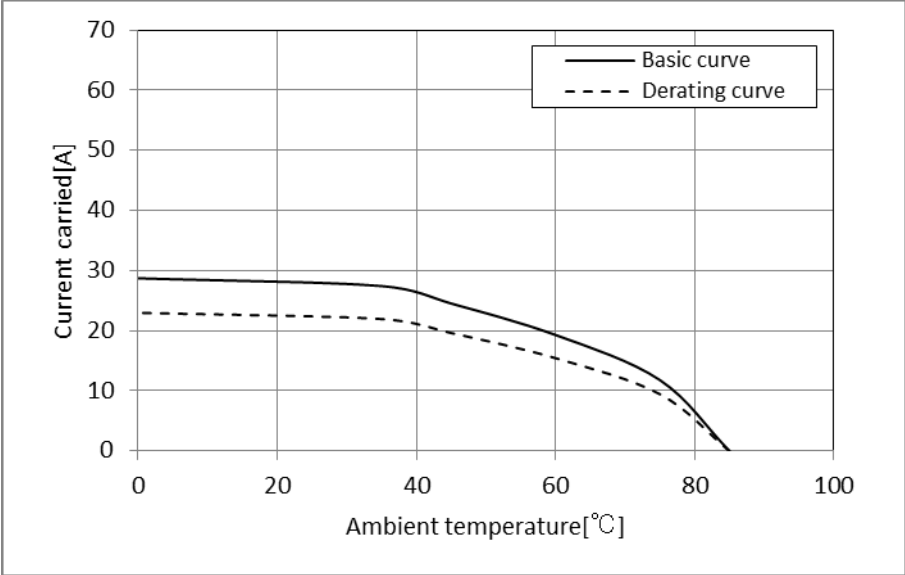


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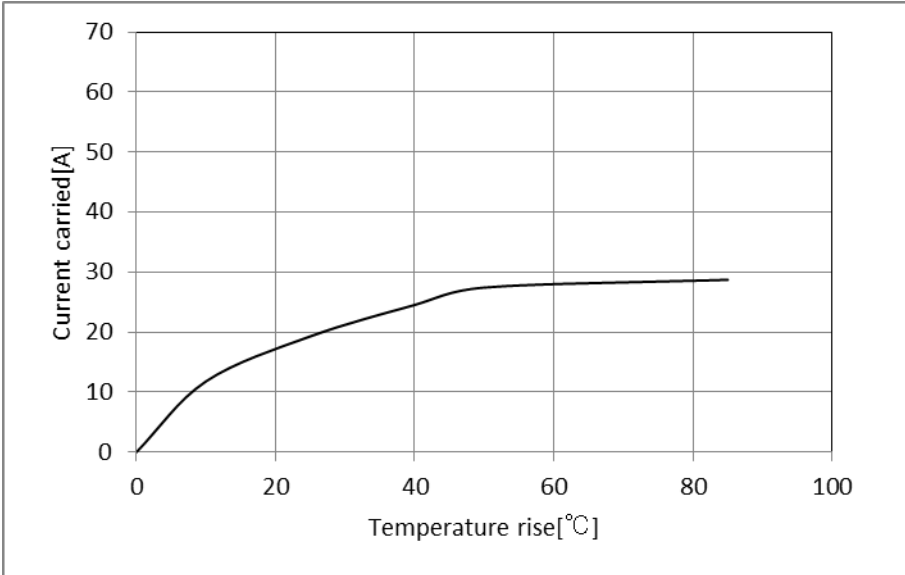
- (Note 11) Measurement method of derating curve is shown below.
- Test specimen:Unused DF22-5P-7.92DS(05).  
Unused DF22-5S-7.92C(28)  
Unused DF22A-1416SCF
  - Test cable spec:AWG 14
  - Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)



[Reference]

Derating curve



Temperature rise curve



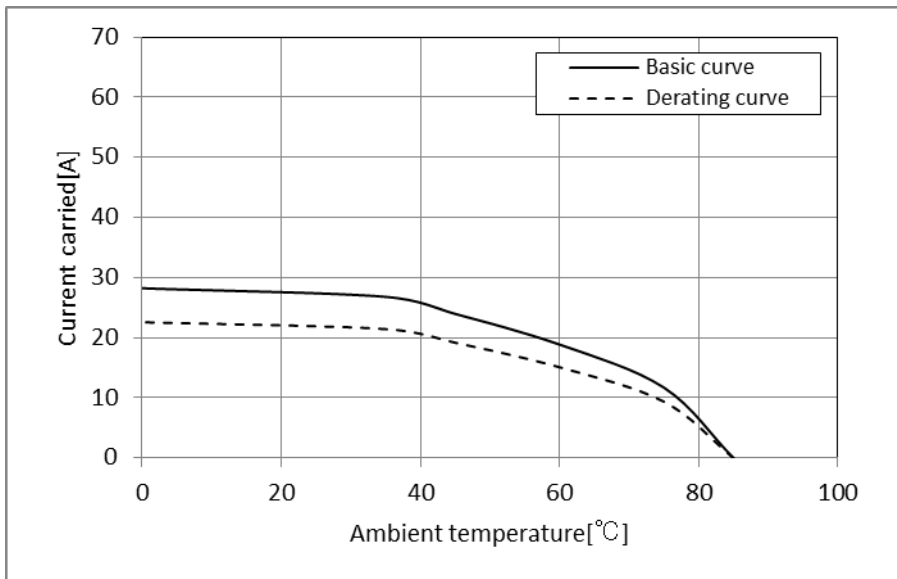
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing no.		ELC4-164777-01		
	Specification sheet	Part no.	DF22B/C-*RS/P-7. 92			
	Hirose electric co., ltd.	Code no.	CL680-		7/9	

(Note 12) Measurement method of derating curve is shown below.

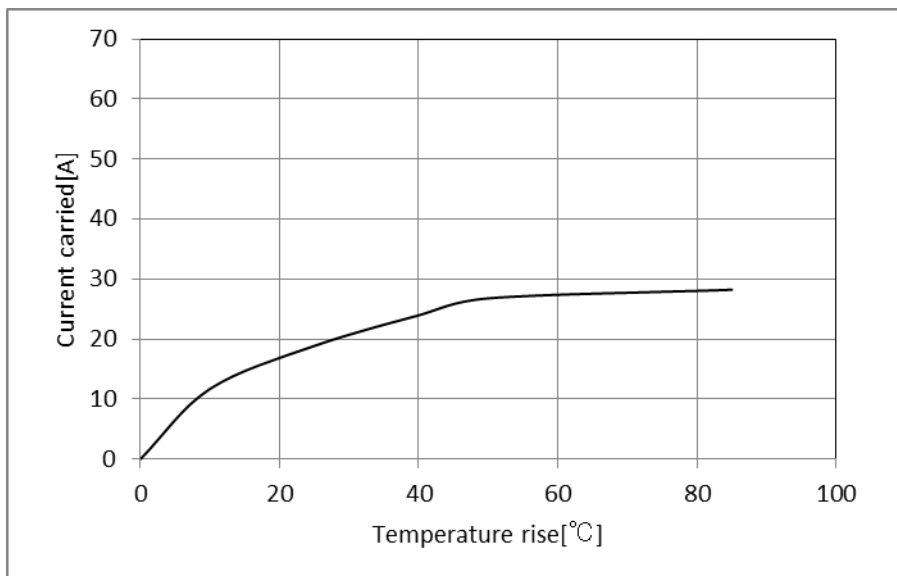
- Test specimen: Unused DF22-3P-7.92DS(05).  
Unused DF22-3S-7.92C(28)  
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test

Drawing no.

ELC4-164777-01



Specification sheet

Part no.

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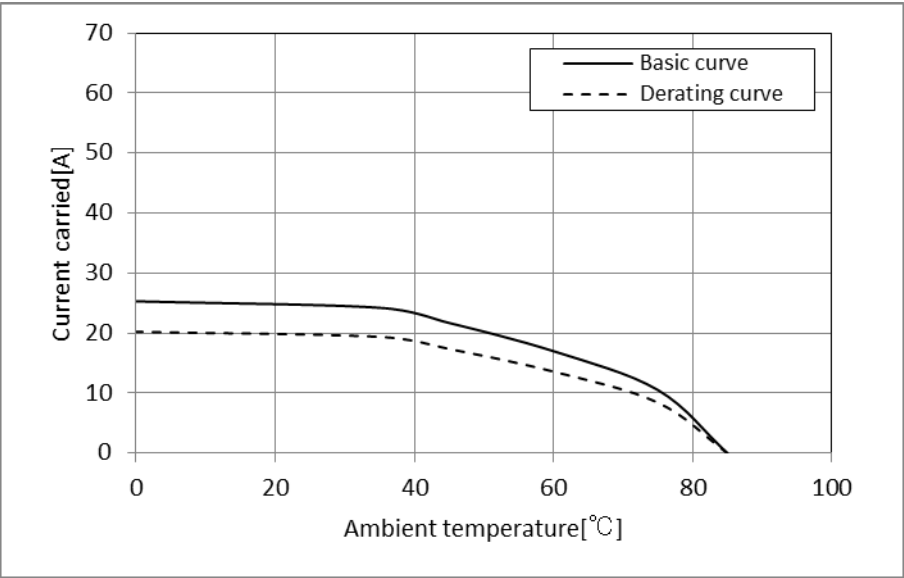


(Note 13) Measurement method of derating curve is shown below.

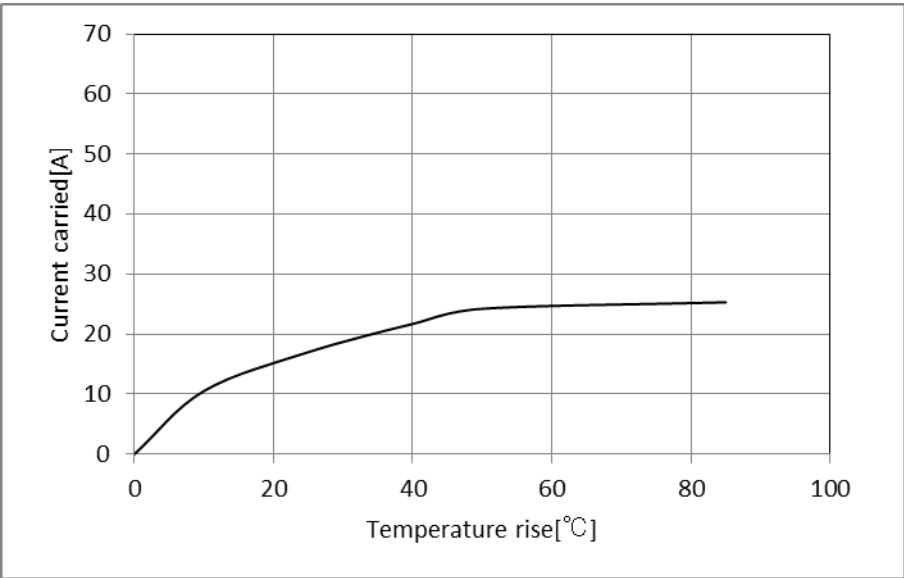
- Test specimen:Unused DF22-5P-7.92DS(05).  
Unused DF22-5S-7.92C(28)  
Unused DF22A-1416SCF
- Test cable spec:AWG 16
- Test condition: Turn on electricity under the static state and measure.  
(Test report # TR680E-20855)



[Reference]

Derating curve



Temperature rise curve



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	Specification sheet	Part no.	DF22B/C-*RS/P-7. 92		
	Hirose electric co., ltd.	Code no.	CL680-		9/9