









Oct.1.2018 Copyright 2018 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case that the application demands a high level of reliability, such as automotive,
please contact a company representative for further information.

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	1000V AC/DC	Applicable connector 	DF22-* (D) EP-7. 92C DF22#-* (D) EP-7. 92C
	Current(* 1) 	AWG14 : 20A AWG16 : 15A	Applicable cable	UL1430/UL1007 : AWG14, AWG16
	Rated voltage	Rated current	Insulation group	IP-Protectio method
UL	AC 600V	AWG14:26A/AWG16:21A (At ambient temp.25°C) (Note 5)	—	—
C-UL	AC 600V	See above(*1) (Temp. rise up 30°C MAX)	—	—
TUV	AC 600V	See above(* 1)	II	IPOO

Specifications

Item	Test method	Requirements	QT	AT
General examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X



Electric characteristics


Contact resistance	20mV MAX, 1mA (DC OR 1000 Hz).	5mΩ MAX.	X	—
<Delete> 				
<Delete> 				

Mechanical characteristics


Mechanical operation	30 times insertions and extractions.	① Contact resistance: 10 mΩ MAX. ② 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.	① No electrical discontinuity of 1 μs. ② No damage, crack or looseness of parts.	X	—
Shock	490 m/s ² duration of pulse 11 ms at 3 times for 3 directions.		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 Contact resistance: 10 mΩ MAX. <Delete>  ② No damage, crack or looseness of parts.	X	—
Damp heat (Steady state)	Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.	① Contact resistance: 10 mΩ MAX. <Delete>  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
 16	DIS-H-00002612	TS. KUMAZAWA	TS. FUKUSHIMA	17. 07. 10

Unless otherwise specified, refer to IEC 60512.

Approved	KJ. KATAYOSE	05. 01. 05
Checked	TY. OMA	05. 01. 05
Designed	HK. UMEHARA	05. 01. 05
Drawn	HK. UMEHARA	05. 01. 05

Note QT:Qualification Test AT:Assurance Test X:Applicable Test Drawing no. ELC4-163621-00

	Specification sheet	Part no.	DF22-1416PCF		
	Hirose electric co., ltd.	Code no.	CL680-1078-0-00		1/6



(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.

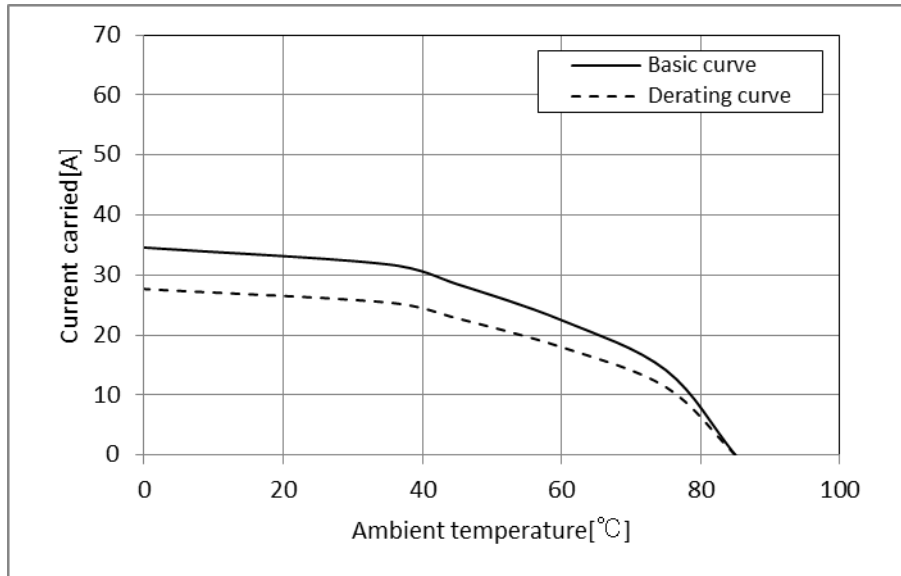
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

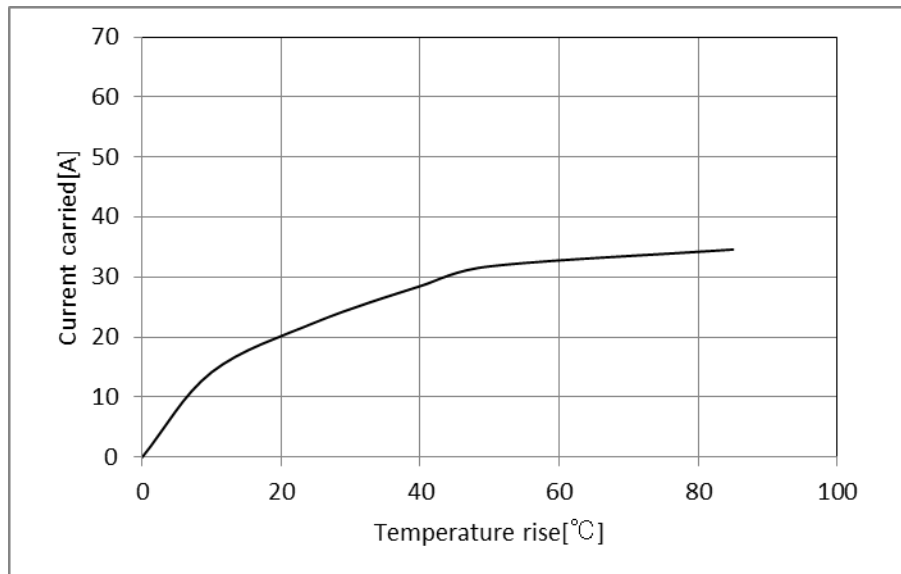
- Test specimen: Unused DF22-1P-7.92DSA(05).
Unused DF22-1S-7.92C(28)
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC4-163621-00



Specification sheet

Part no.

DF22-1416PCF

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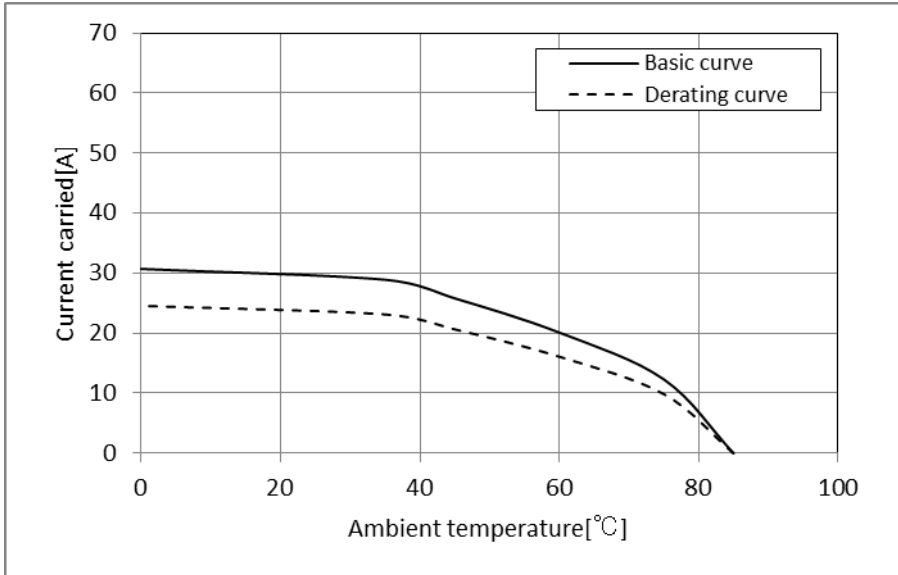


(Note 7) Measurement method of derating curve is shown below.

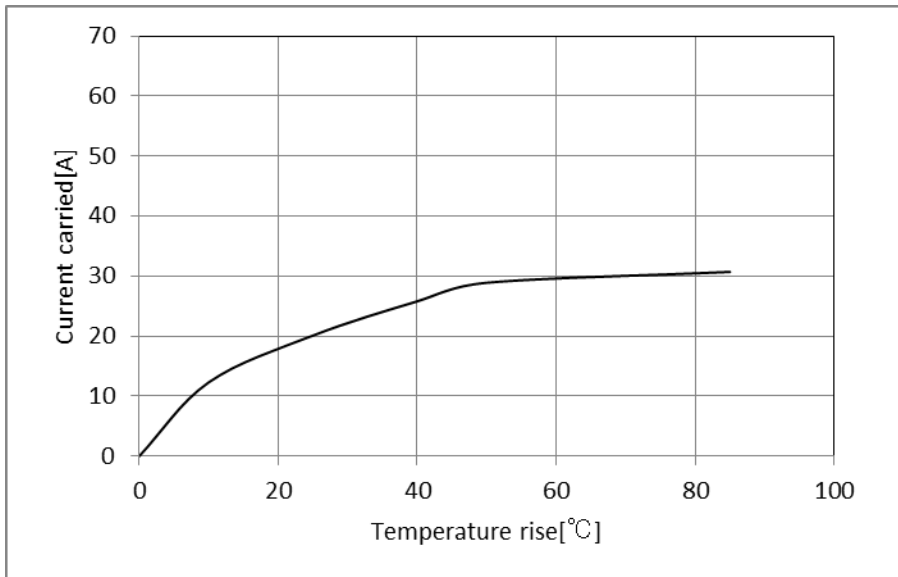
- Test specimen: Unused DF22-3P-7.92DS(05).
Unused DF22-3S-7.92C(28)
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

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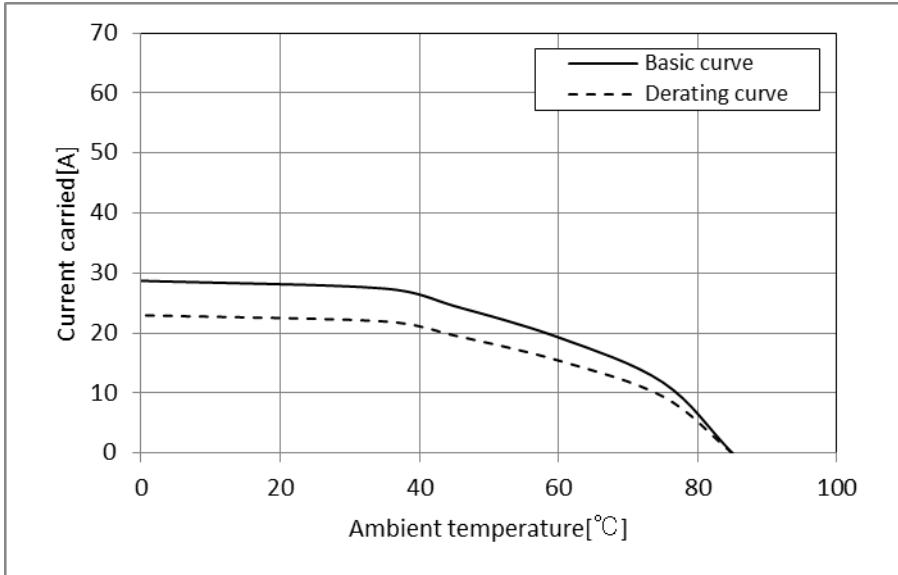


(Note 8) Measurement method of derating curve is shown below.

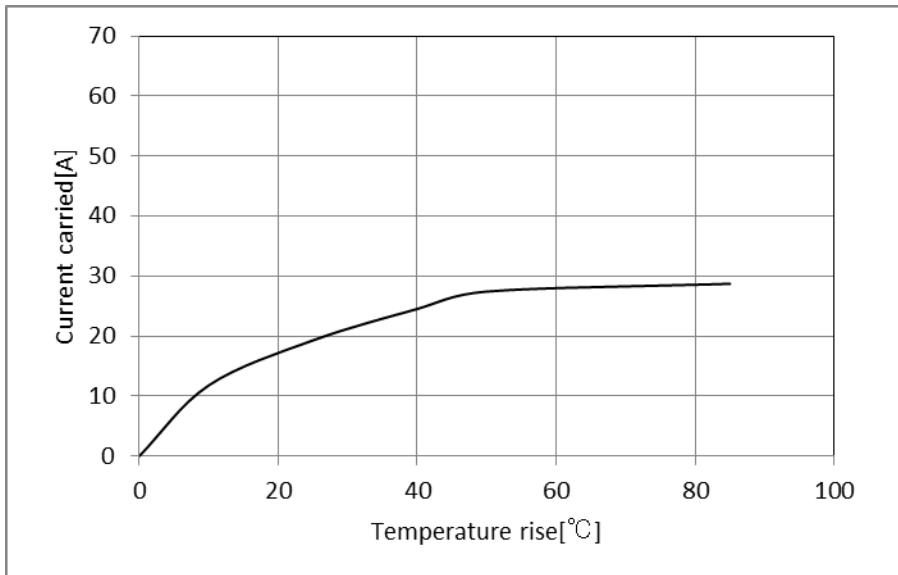
- Test specimen: Unused DF22-5P-7.92DS(05).
Unused DF22-5S-7.92C(28)
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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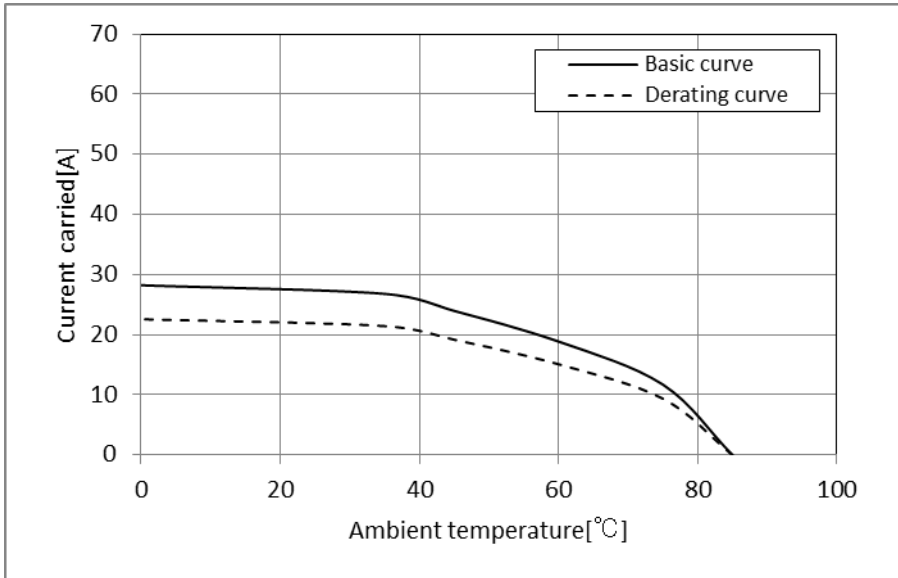


(Note 9) Measurement method of derating curve is shown below.

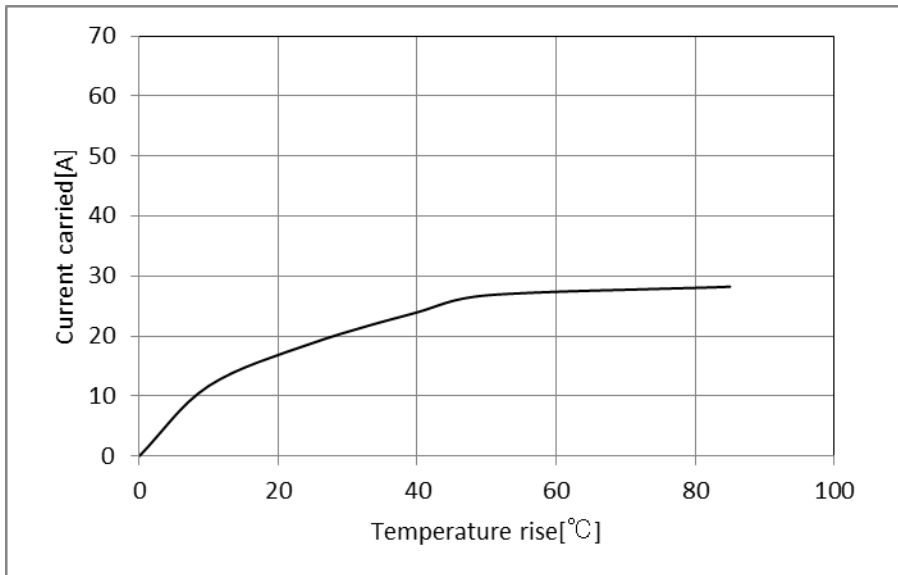
- Test specimen: Unused DF22-3P-7.92DS(05).
Unused DF22-3S-7.92C(28)
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

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Specification sheet

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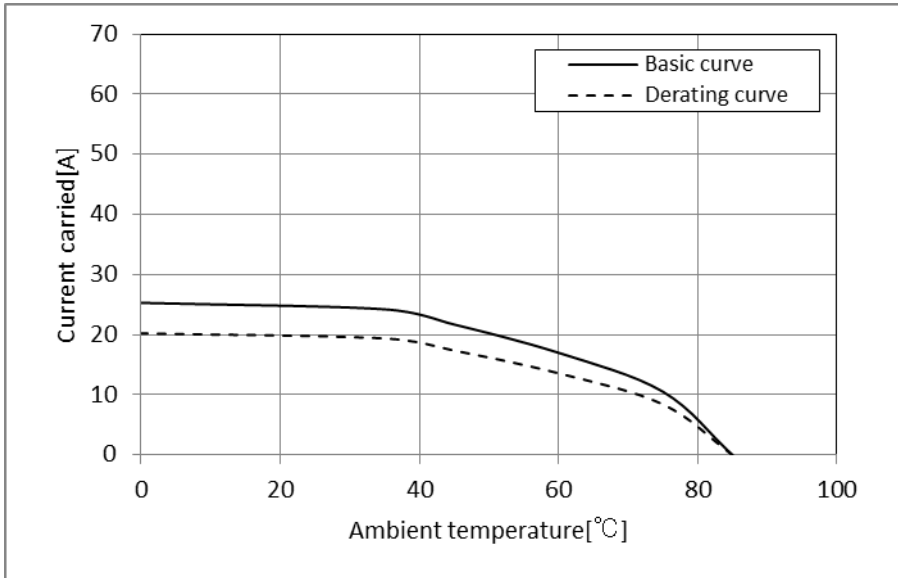


(Note 10) Measurement method of derating curve is shown below.

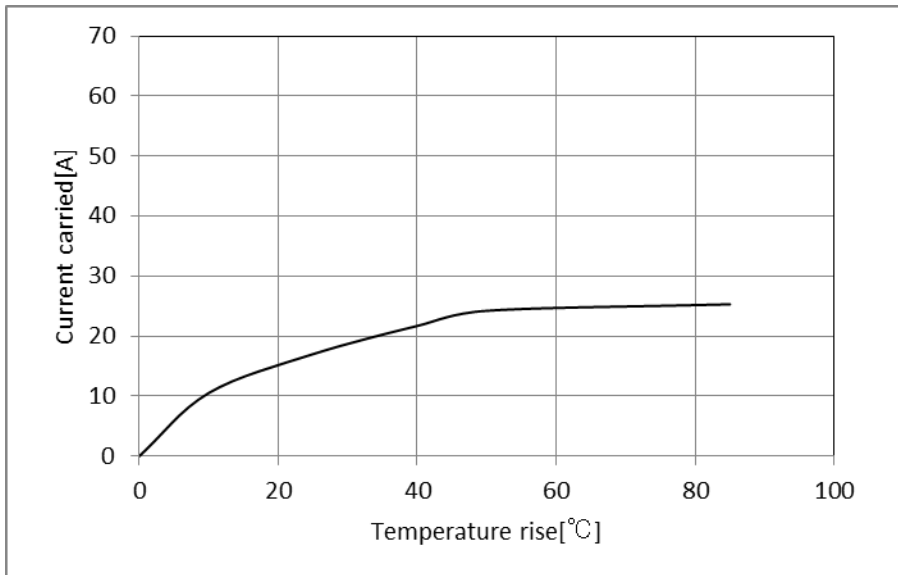
- Test specimen: Unused DF22-5P-7.92DS(05).
Unused DF22-5S-7.92C(28)
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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