

Applicable standard										
Rating	Operating temperature range	-55°C to + 85°C(Note 1)				Storage temperature range	-10°C to + 60°C(Note2)			
	Operating humidity range	20% to 80% (Note3)				Storage humidity range	40% to 70%(Note2)			
	Voltage	AC 1000V DC				Applicable Connector	DF22 -*S-7.92C(28) DF22#-*S-7.92C(#=B,C)			
	Current(*1)	Contact	1	2,3	4,5	Current(*2)	Contact	1	2,3	4,5
		AWG10	43A	38A	33A		AWG10	30A	25A	22A
		AWG12	38A	32A	26A		AWG12	25A	20A	18A
		AWG14	26A	23A	22A		AWG14	20A	18A	15A
		AWG16	21A	21A	19A		AWG16	15A	15A	13A
	Rated voltage	Rated current				Insulationgroup	IP-Protectio method			
UL	AC 600V	See above(*1) (At ambient temp.25°C)(Note 5)				—	—			
C-UL	AC 600V	See above(*2) (Temp. rise up 30°C MAX)				—	—			
TÜV	AC 600V	See above(*2)				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										
Contact resistance millivoltlevel method		20mV MAX, 1mA (DC OR 1000 Hz).				5 mΩ MAX.			X	—
Insulation resistance		1000V DC.				1000MΩ MIN.			X	—
Voltage proof		2500V AC for 1 min.				No flashover or breakdown.			X	—
Mechanical characteristics										
Mechanical operation		50times insertions and extractions.				① Contact resistance: 10mΩ 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 1μs. 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.				① No electrical discontinuity of 1μs. ② 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 Contact resistance: 10mΩ MAX. ② Insulation resistance: 1000MΩ MIN. ③ 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: 10mΩ MAX. ② Insulation resistance: 500MΩ MIN. ③ No damage, crack or looseness of parts.			X	—
Resistance to soldering heat		①Automatic Soldering (Flow) Solder temperature : 260°C for Immersion,duration : 10 sec . ②Manual soldering Soldering iron temperature : 350°C Soldering time : 3 sec. No strength on contact.				No deformation of case of excessive looseness of the terminals.			X	—
Solderability		Soldered at solder temperature, 235°C for insertion duration, 5sec.				Solder shall cover a minimum of 95 % of the surface being immersed.			X	—
Remarks										
Note 1:Including the temperature rising by current.										
Note 2: No condensing.										
Note 3: Apply to the condition of long term storage for unused products before mounted on PCB.										
After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation.										
	Count	Description of revisions				Designed		Checked		Date
△										
Unless otherwise specifid , refer to IEC 60512.						Approved	HS. OKAWA		17. 08. 22	
						Checked	TS. FUKUSHIMA		17. 08. 22	
						Designed	MI. SAKIMURA		17. 08. 22	
						Drawn	MI. SAKIMURA		17. 08. 22	
Note QT:Qualification Test AT:Assurance Test X:Applicable Test						Drawing no.		ELC-163719-06-00		
HRS	Specification sheet					Part no.		DF22-*P-7. 92DSA (06)		
	HIROSE ELECTRIC CO., LTD.					Code no.		CL680		△ 1/12

(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.

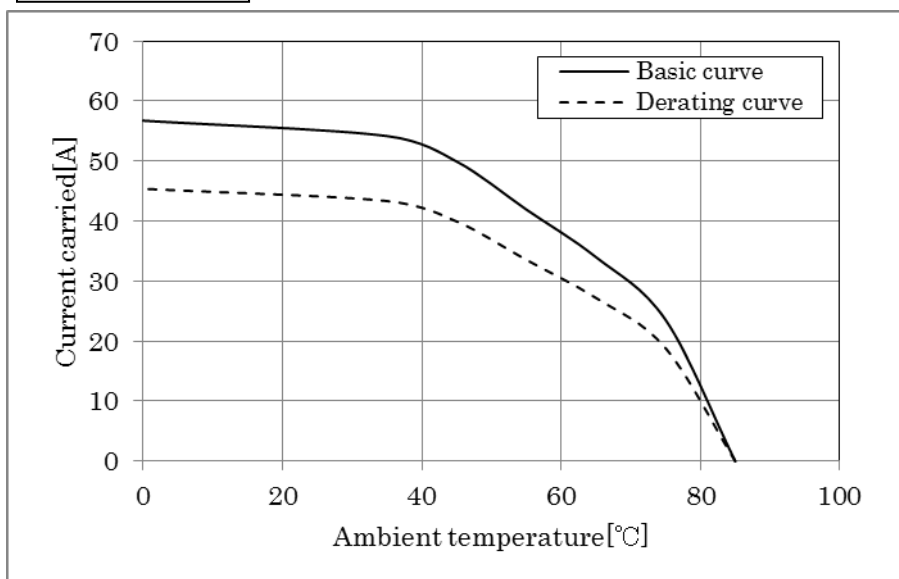
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

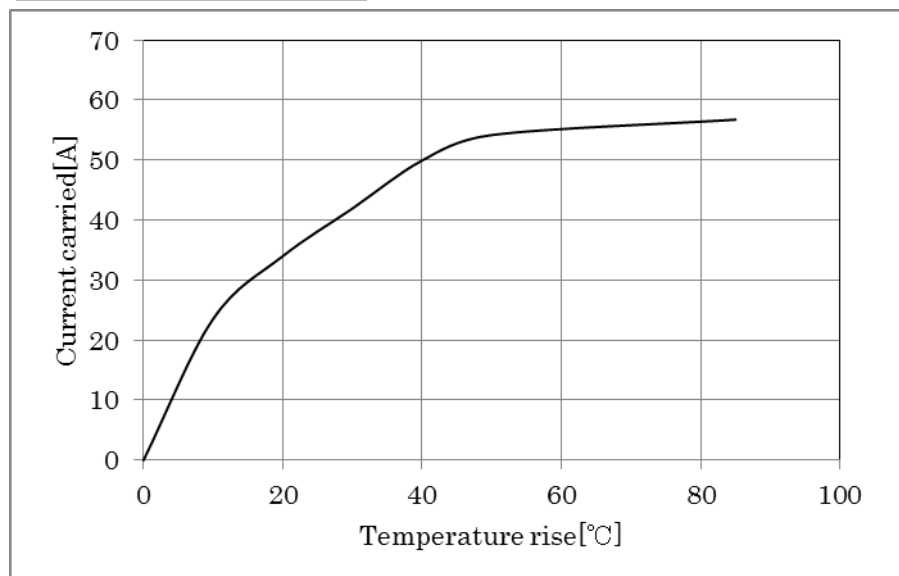
- Test specimen: Unused DF22-1P-7.92DSA(05)
Unused DF22-1S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20618)


[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing no.		ELC-163719-06-00	
HRS	Specification sheet	Part no.	DF22-*P-7. 92DSA (06)		
	Hirose electric co., ltd.	Code no.	CL680		2/12

(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.

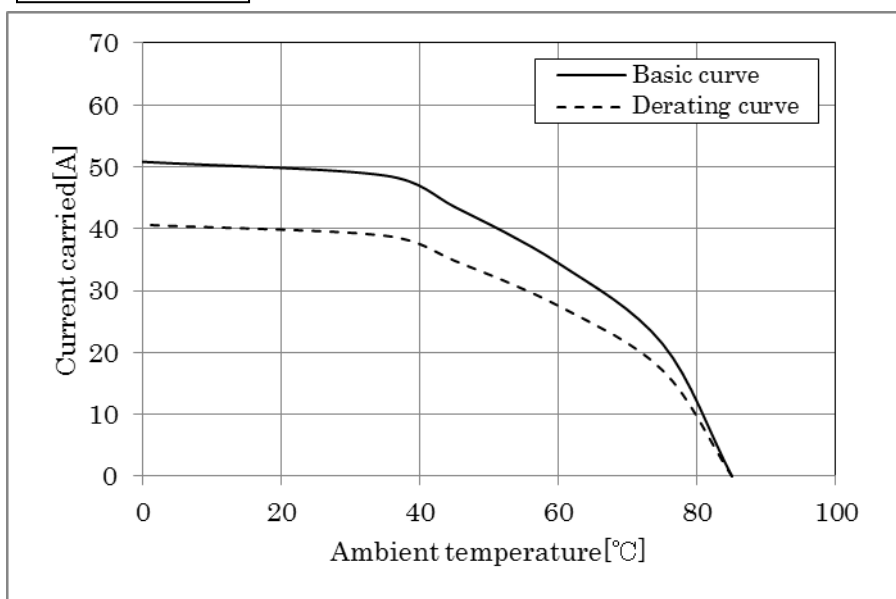
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

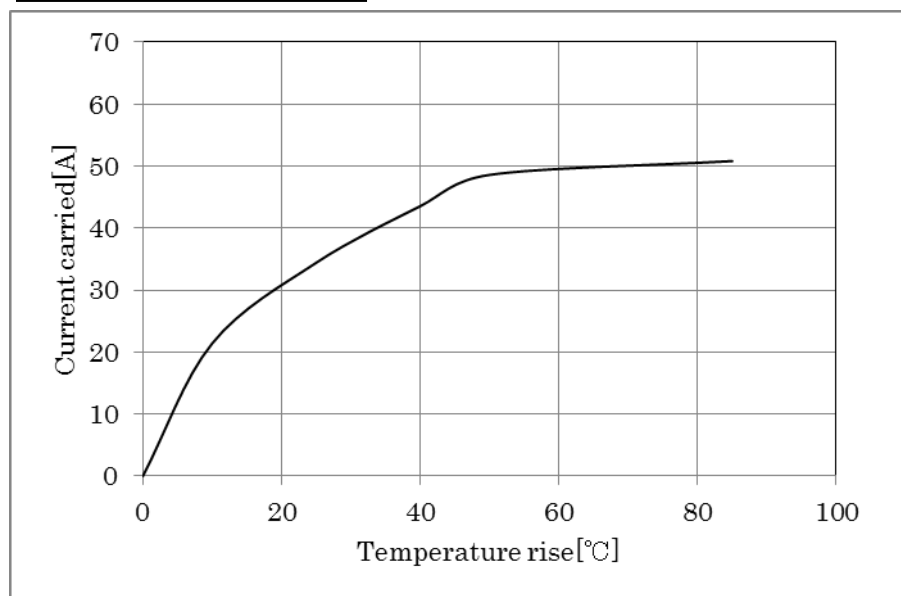
- Test specimen: Unused DF22-3P-7.92DS(05)
Unused DF22-3S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing no.		ELC-163719-06-00	
	Specification sheet		Part no.	DF22-*P-7.92DSA (06)	
	Hirose electric co., ltd.		Code no.	CL680	3/12

(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.

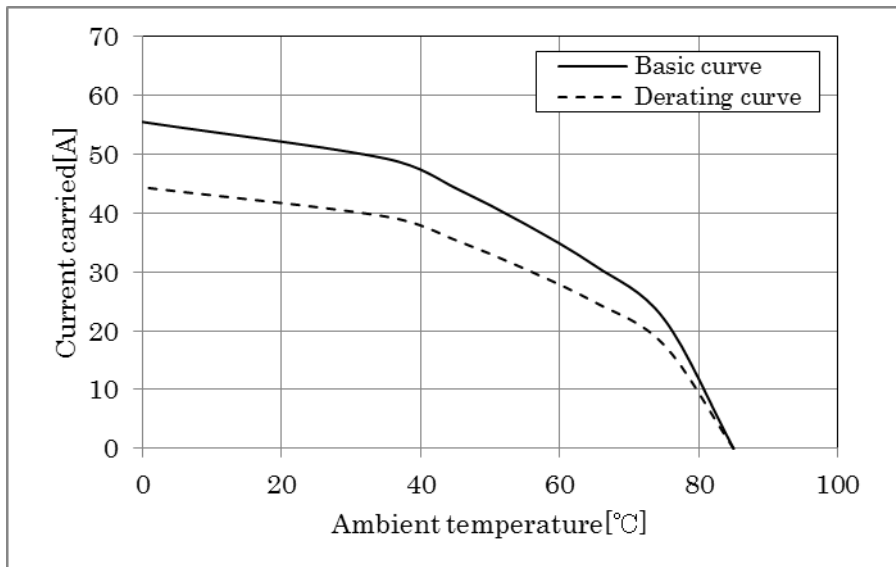
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

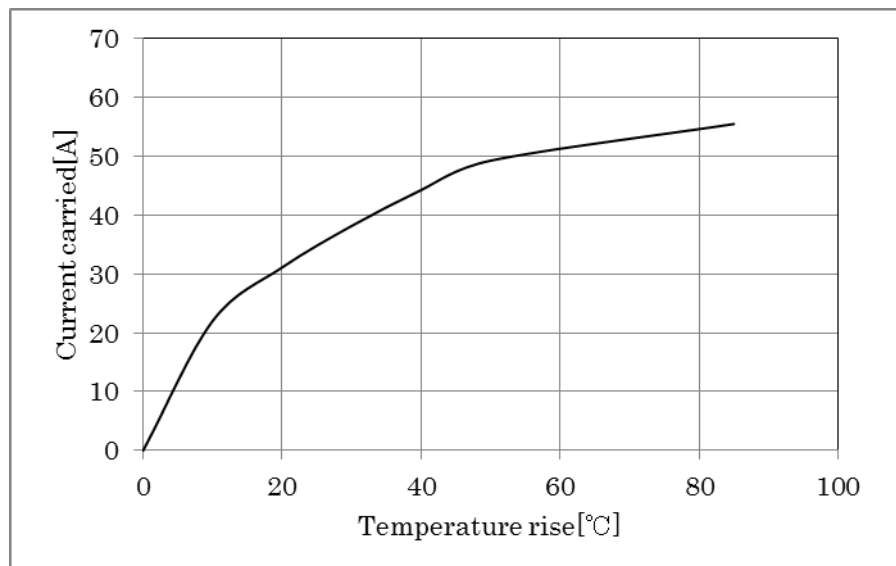
- Test specimen: Unused DF22-5P-7.92DSA(05)
Unused DF22-5S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20587)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., Ltd.

Code no.

CL680



4/12

(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.

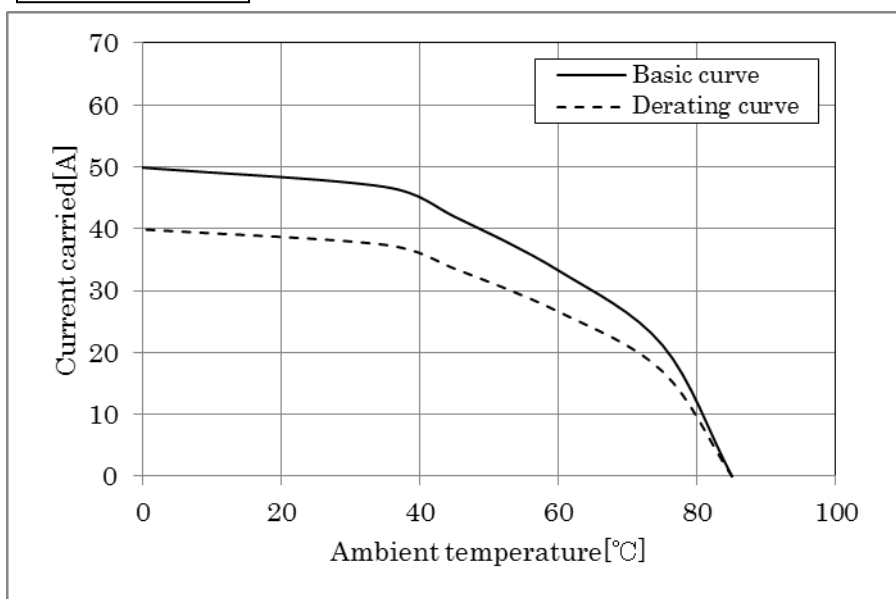
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

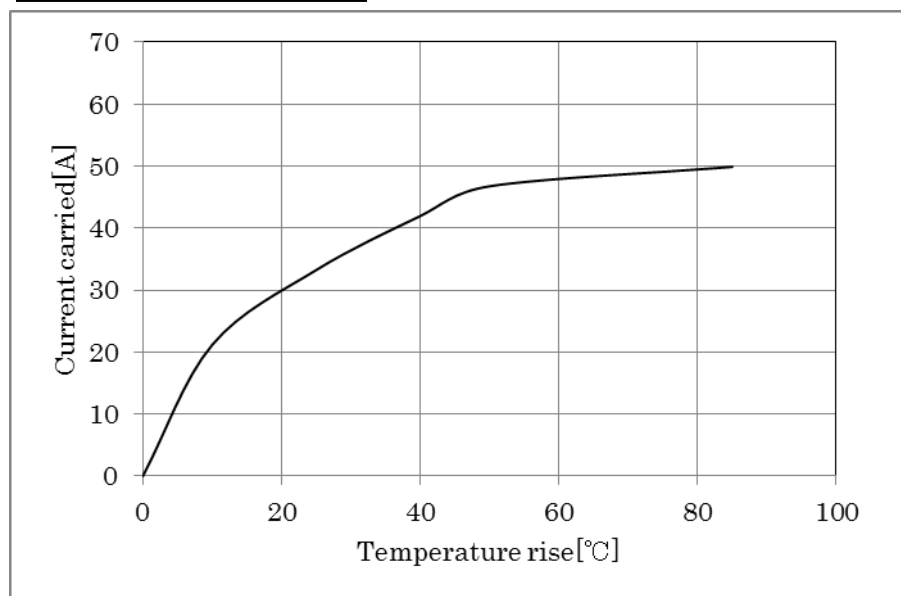
- Test specimen: Unused DF22-1P-7.92DS(05)
Unused DF22-1S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



5/12

(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.

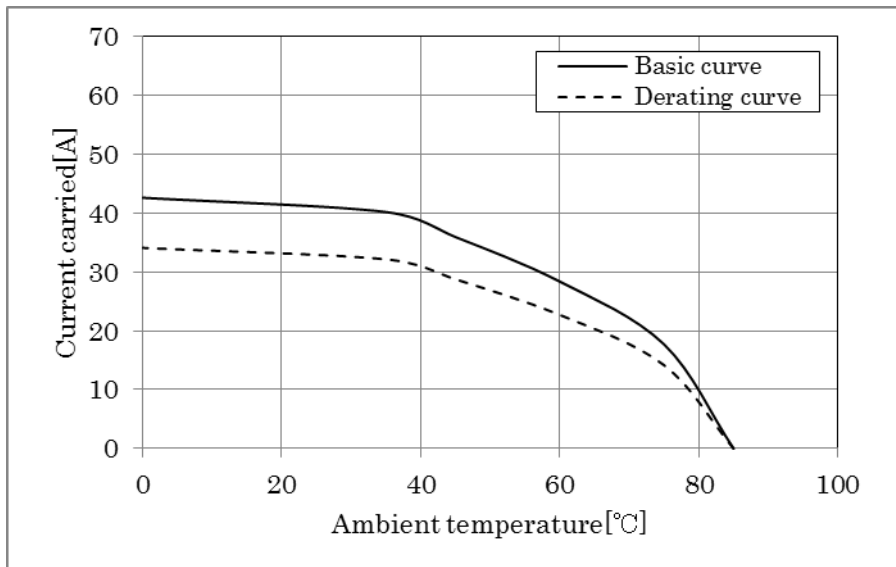
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

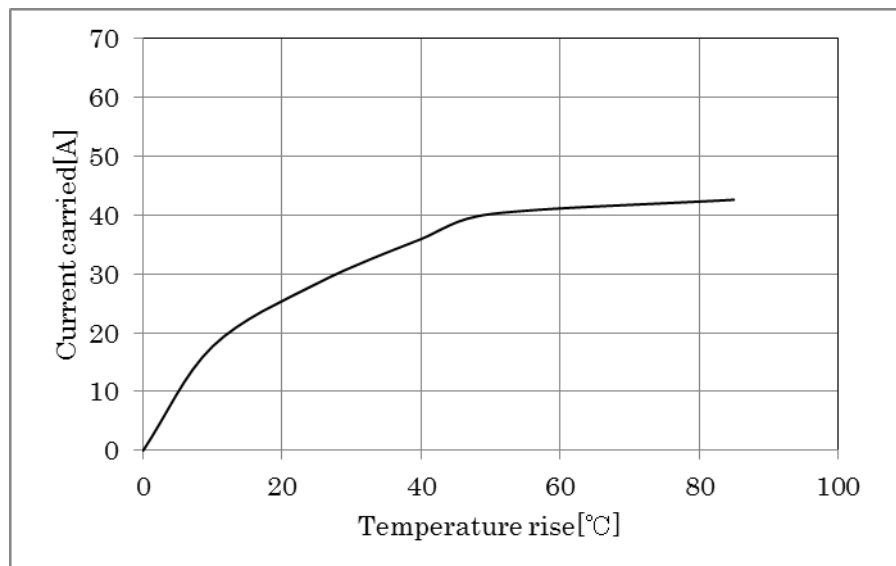
- Test specimen: Unused DF22-3P-7.92DS(05)
Unused DF22-3S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., Ltd.

Code no.

CL680



6/12

(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.

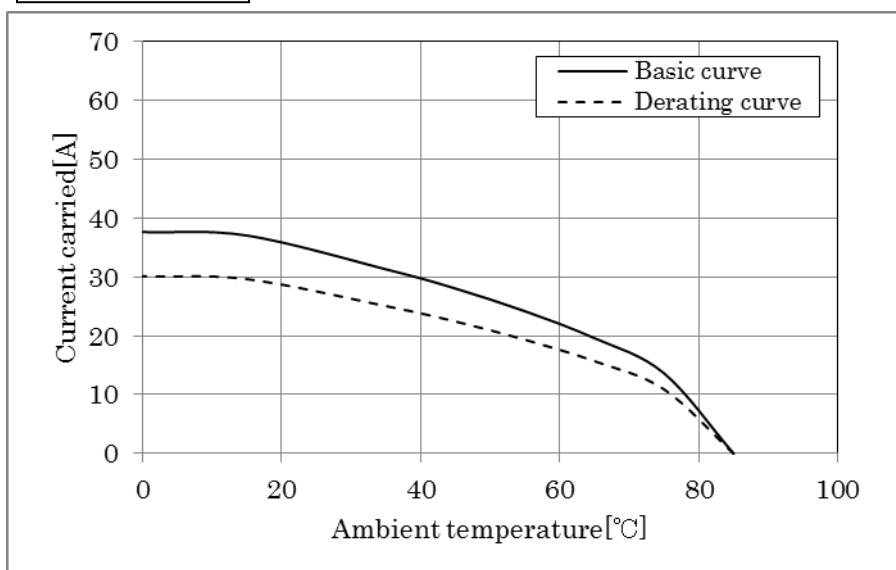
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

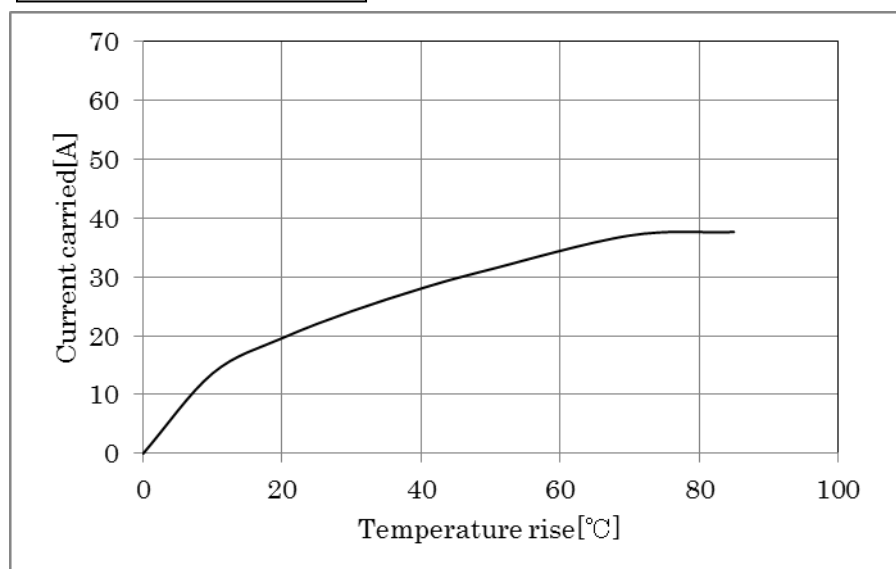
- Test specimen: Unused DF22-5P-7.92DSA(05)
Unused DF22-5S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20810)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



7/12

(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.

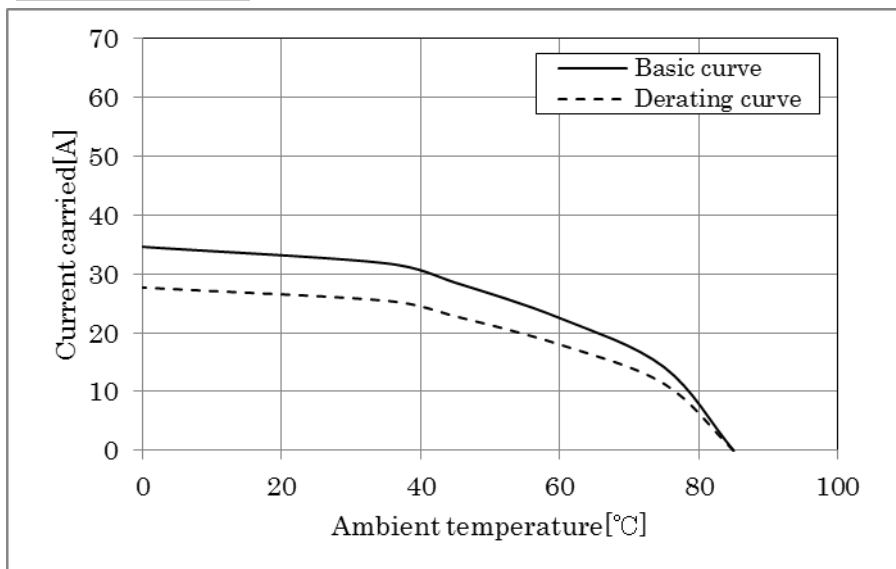
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

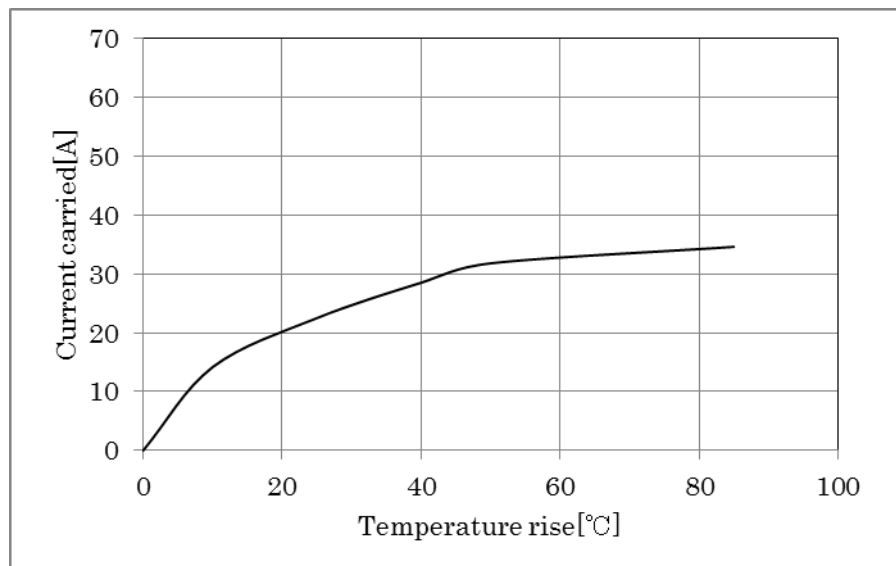
- Test specimen: Unused DF22-1P-7.92DSA(05)
Unused DF22-1S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



8/12

(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.

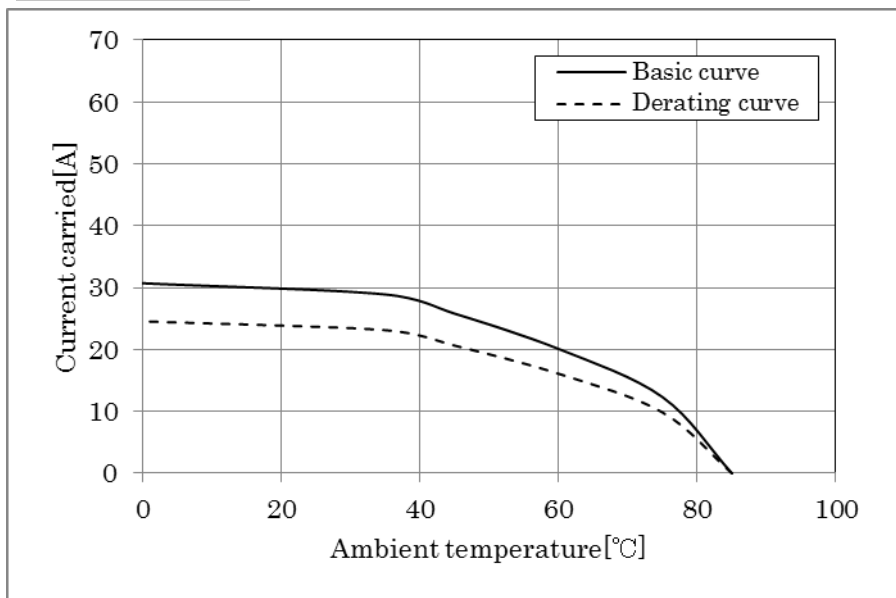
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

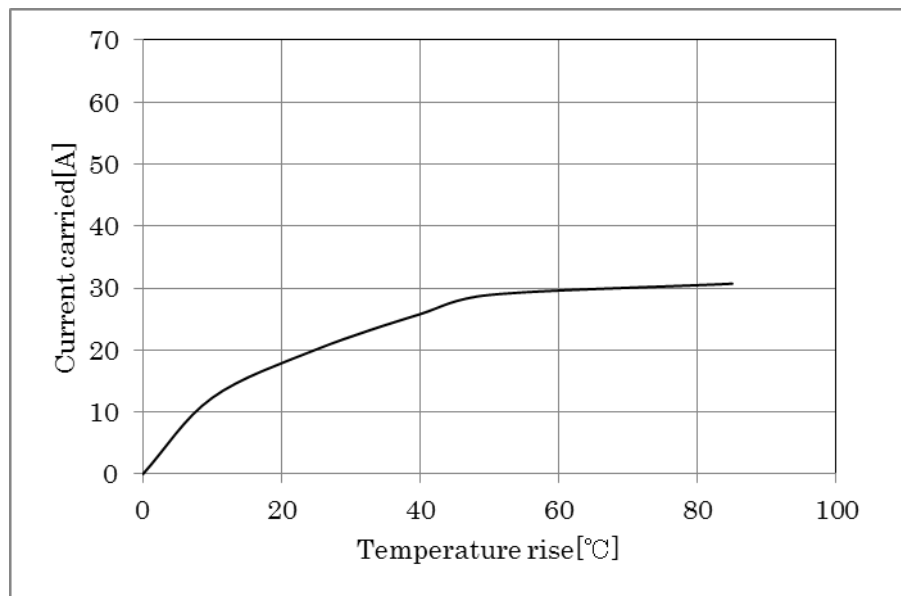
- Test specimen: Unused DF22-3P-7.92DS(05)
Unused DF22-3S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



9/12

(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.

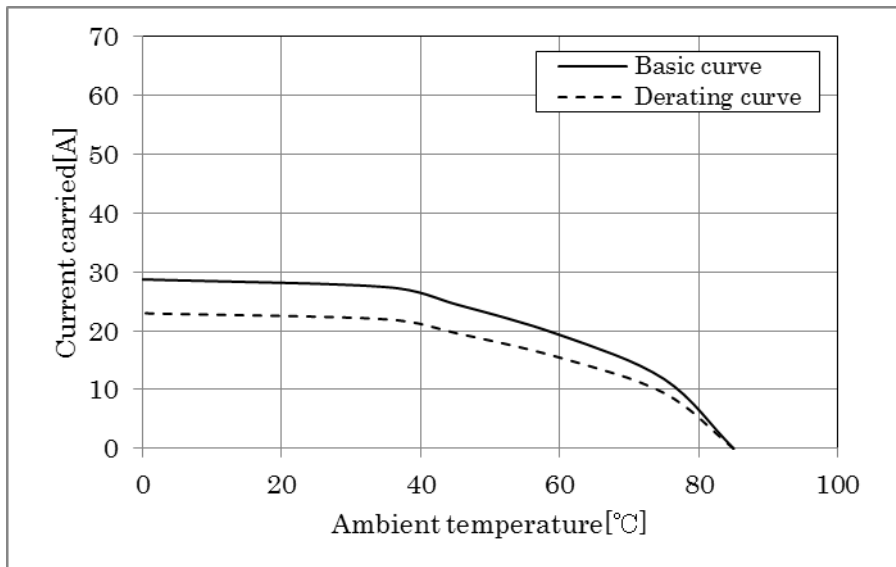
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

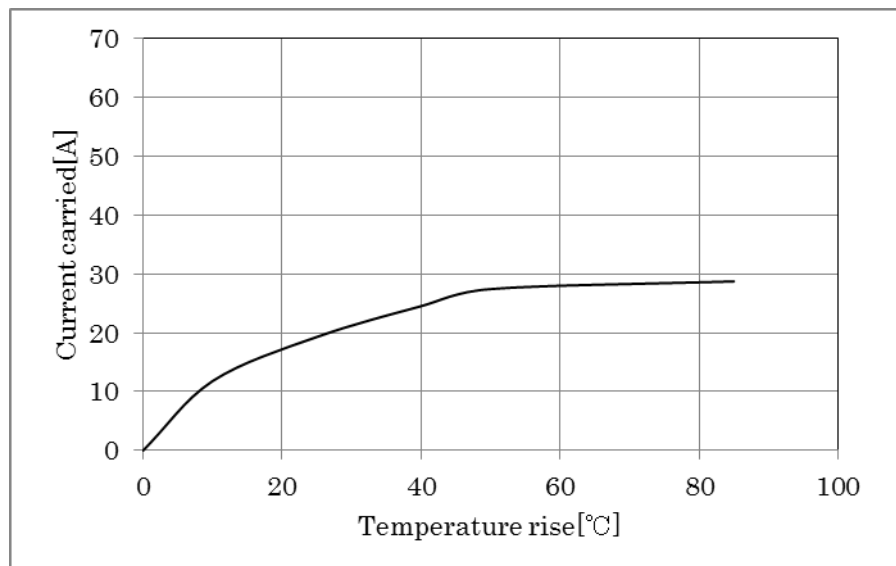
- Test specimen: Unused DF22-5P-7.92DSA(05)
Unused DF22-5S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



10/12

(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.

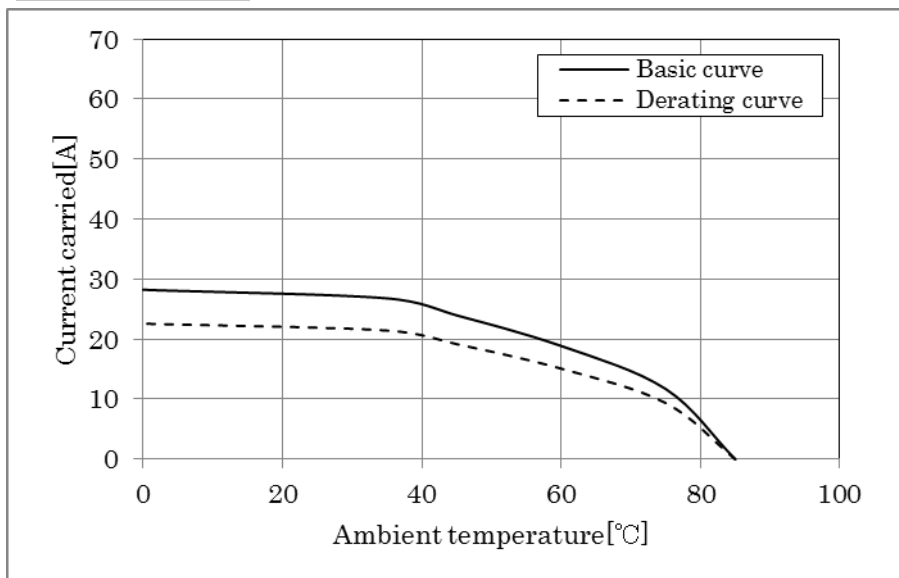
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

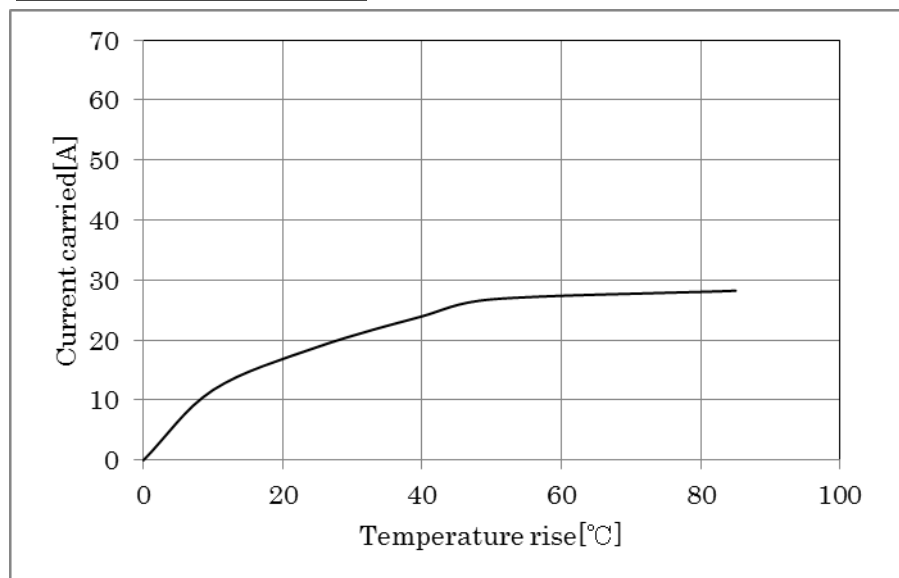
- Test specimen: Unused DF22-3P-7.92DS(05)
Unused DF22-3S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163719-06-00

HRS

Specification sheet

Part no.

DF22-*P-7.92DSA (06)

Hirose electric co., ltd.

Code no.

CL680



11/12

(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.

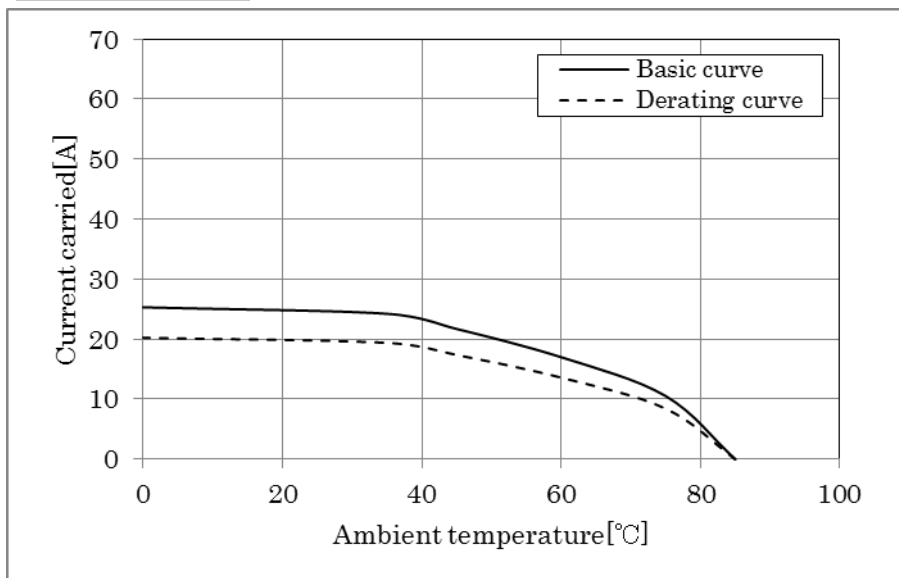
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

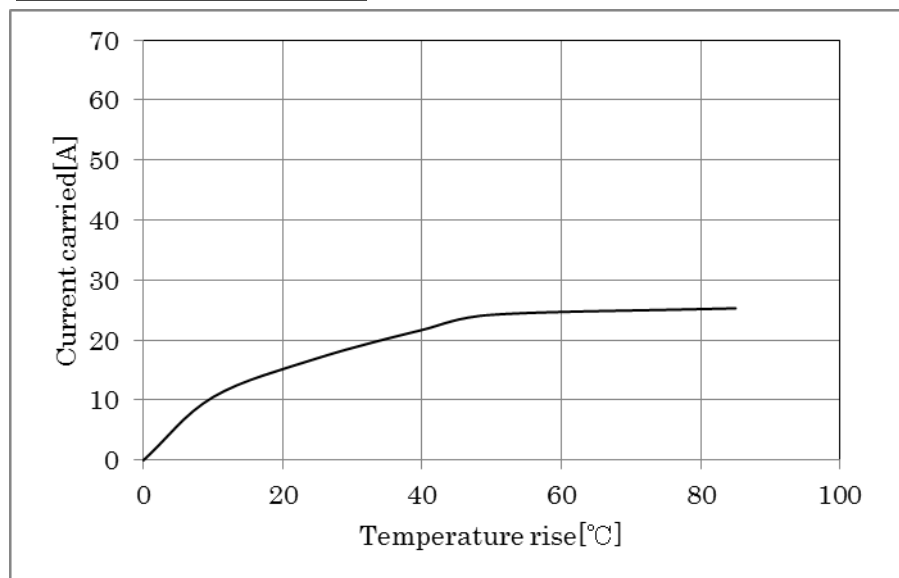
- Test specimen: Unused DF22-5P-7.92DSA(05)
Unused DF22-5S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)


[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing no.		ELC-163719-06-00	
HRS	Specification sheet	Part no.	DF22-*P-7. 92DSA (06)		
	Hirose electric co., ltd.	Code no.	CL680		12/12