

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	DF22-1S-7.92C(28) DF22C-1S-7.92C	
	Current(* 1)	AWG10 : 30A AWG12 : 25A AWG14 : 20A AWG16 : 15A			
	Rated voltage	Rated current		Insulation group	IP-Protectio method
UL	AC 600V	AWG10:43A/AWG12:38A/AWG14:26A/AWG16:21A (At ambient temp.25°C)(Note 5)		—	—
C-UL	AC 600V	See above(*1) (Temp. rise up 30°C MAX)		—	—
TÜV	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					
Contact resistance millivoltlevel method		20mV MAX, 1mA (DC OR 1000 Hz).		5 mΩ MAX.	X —
Mechanical characteristics					
Mechanical operation		30 times 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 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 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: 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.					
Note 3: No condensing.					
	Count	Description of revisions	Designed	Checked	Date
⚠					
Unless otherwise specifid , refer to IEC 60512.				Approved	HS. OKAWA
				Checked	TS. FUKUSHIMA
				Designed	MI. SAKIMURA
				Drawn	MI. SAKIMURA
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.	ELC-163202-25-00	
HRS	Specification sheet		Part no.	DF22-1P-7. 92DSA (25)	
	HIROSE ELECTRIC CO., LTD.		Code no.	CL680-1013-5-25	⚠ 1/5

(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.

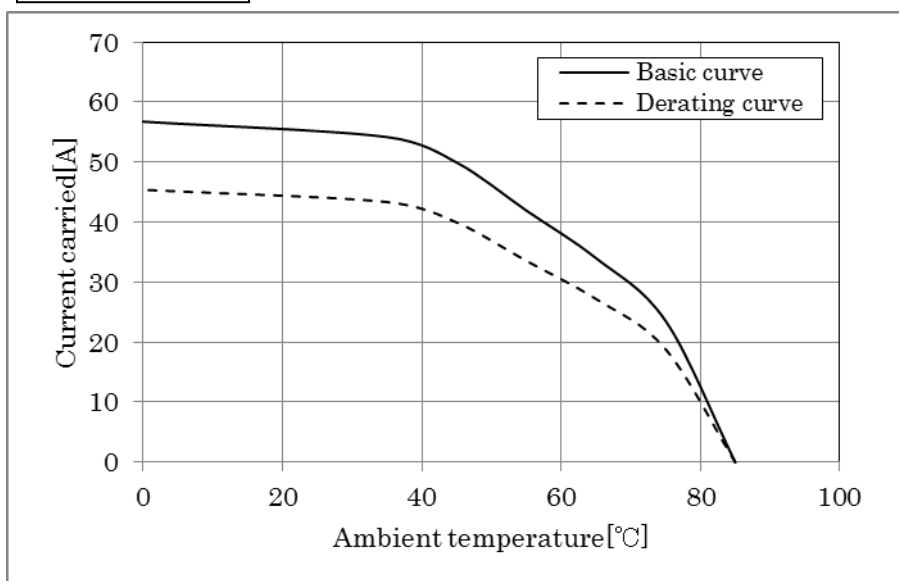
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

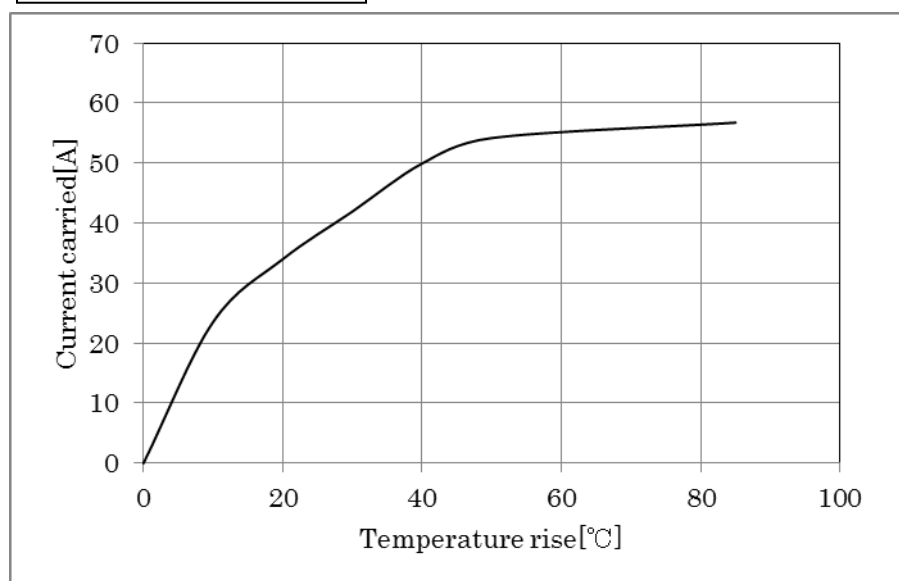
- Test specimen: Unused DF22-1P-7.92DSA(05).
Unused DF22-1S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20618)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163202-25-00

HRS

Specification sheet

Part no.

DF22-1P-7.92DSA (25)

Hirose electric co., ltd.

Code no.

CL680-1013-5-25



2/5

(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.

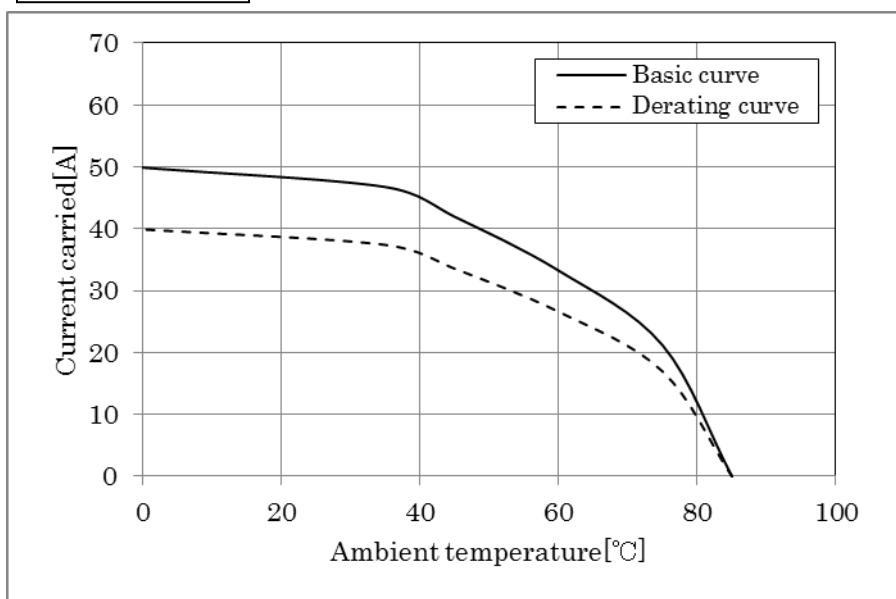
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

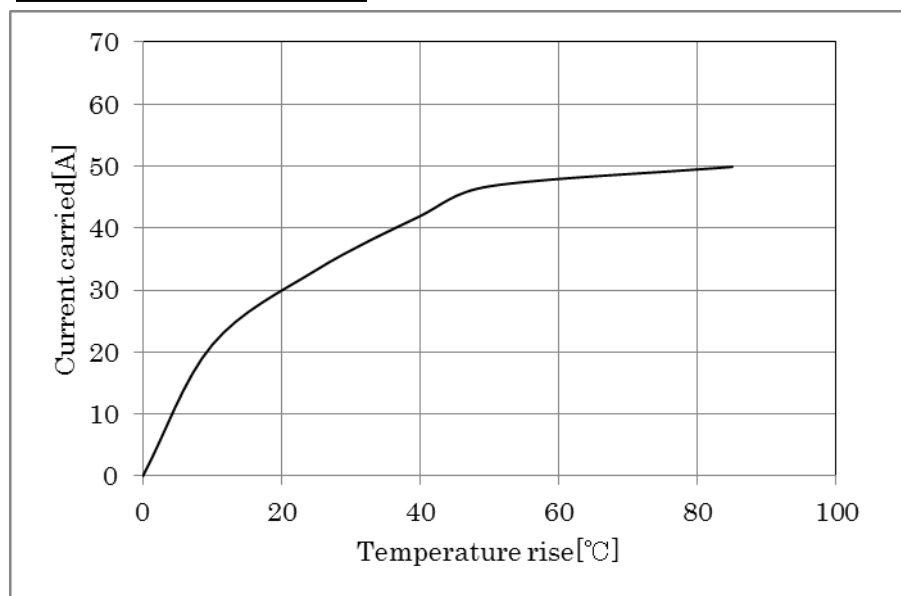
- Test specimen: Unused DF22-1P-7.92DSA(05).
Unused DF22-1S-7.92C
Unused DF22A-1012SCF
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163202-25-00

HRS

Specification sheet

Part no.

DF22-1P-7.92DSA (25)

Hirose electric co., ltd.

Code no.

CL680-1013-5-25



3/5

(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.

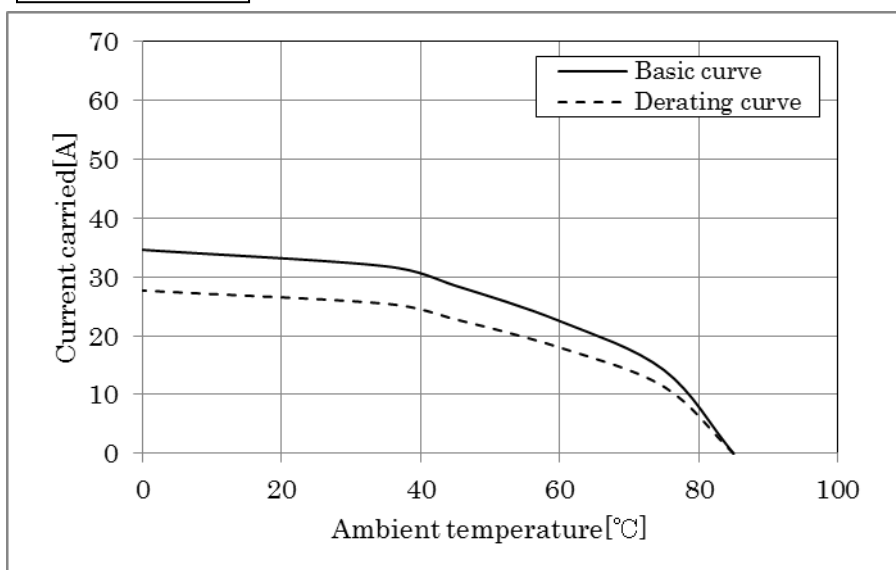
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

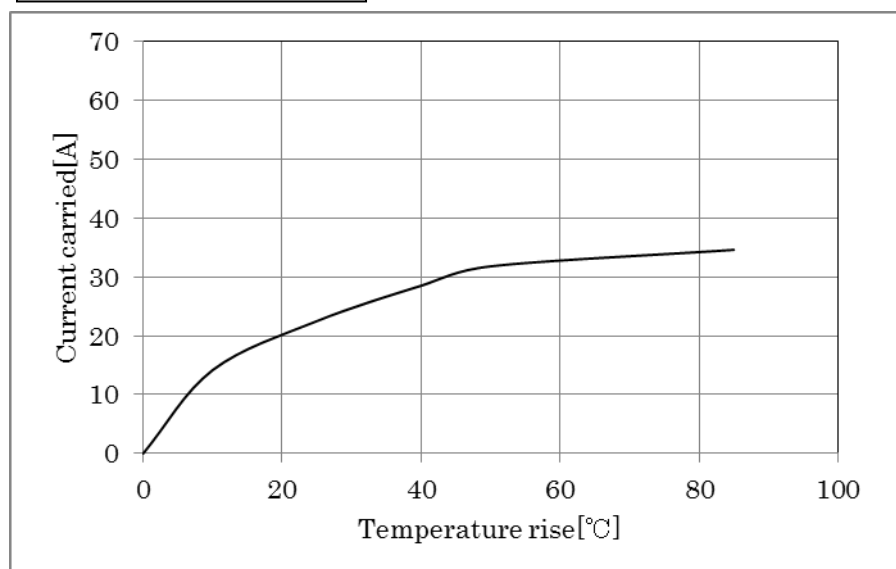
- Test specimen: Unused DF22-1P-7.92DSA(05).
Unused DF22-1S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163202-25-00

HRS

Specification sheet

Part no.

DF22-1P-7.92DSA (25)

Hirose electric co., ltd.

Code no.

CL680-1013-5-25



4/5

(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.

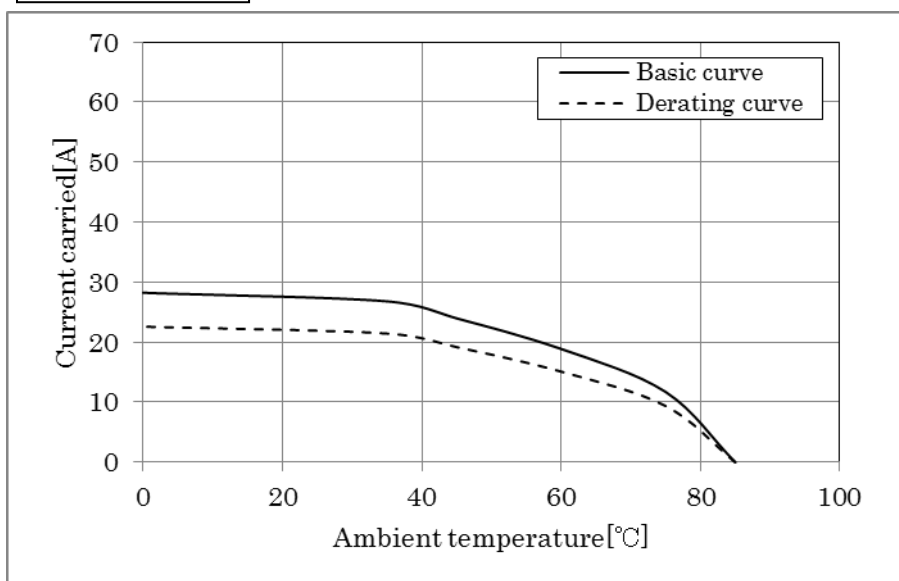
(Note 5) The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.

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

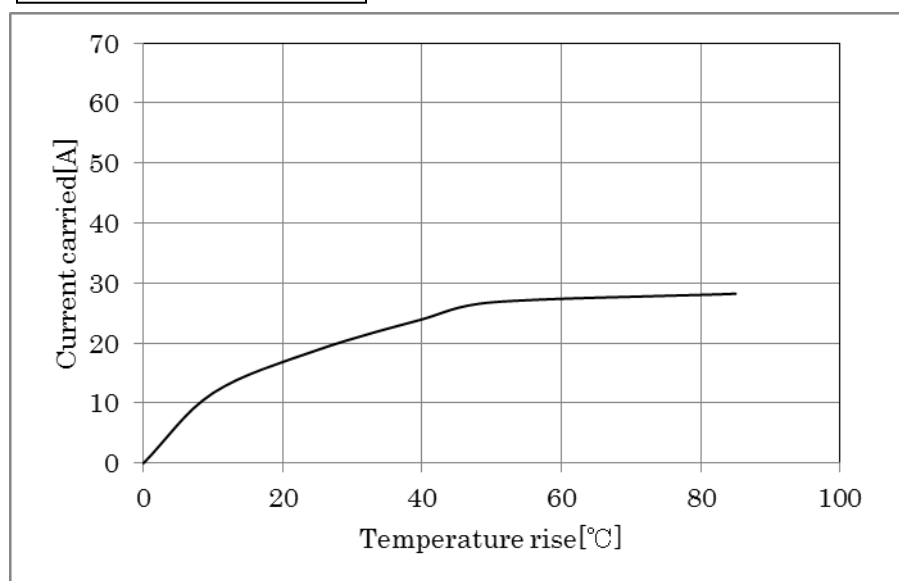
- Test specimen: Unused DF22-3P-7.92DS(05).
Unused DF22-3S-7.92C
Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

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Specification sheet

Part no.

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5/5