






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	DF22-2S-7. 92C (28) DF22#-2S-7. 92C #=B, C	
	Current (*1)	AWG10 : 25A AWG12 : 20A AWG14 : 18A AWG16 : 15A			
	Rated voltage	Rated current	Insulation group	IP-Protectio method	
UL	AC 600V	AWG10:38A/AWG12:32A/AWG14:23A/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 Millivolt level method	20mV MAX, 1mA (DC or 1000 Hz).		5mΩ 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	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 <sup>2</sup> 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	① Automatic soldering (Flow) Solder temperature : 260°C for Immersion, duration : 10 sec . ② Manual 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: 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
	6	DIS-H-00002574	TS. KUMAZAWA	TS. FUKUSHIMA	17. 07. 08
Unless otherwise specified , refer to IEC 60512.			Approved	KI. AKIYAMA	15. 07. 02
			Checked	TS. FUKUSHIMA	15. 07. 02
			Designed	TS. KUMAZAWA	15. 07. 01
			Drawn	MI. SAKIMURA	15. 07. 01
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.	ELC-163023-35-00	
	Specification sheet		Part no.	DF22-2P-7. 92DS (35)	
	Hirose electric co., ltd.		Code no.	CL680-1008-5-35	 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.

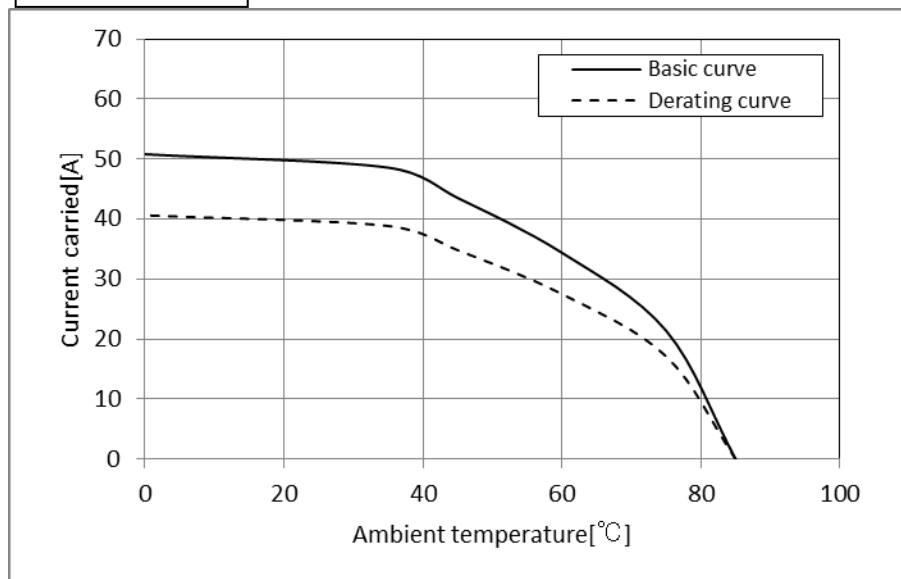
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

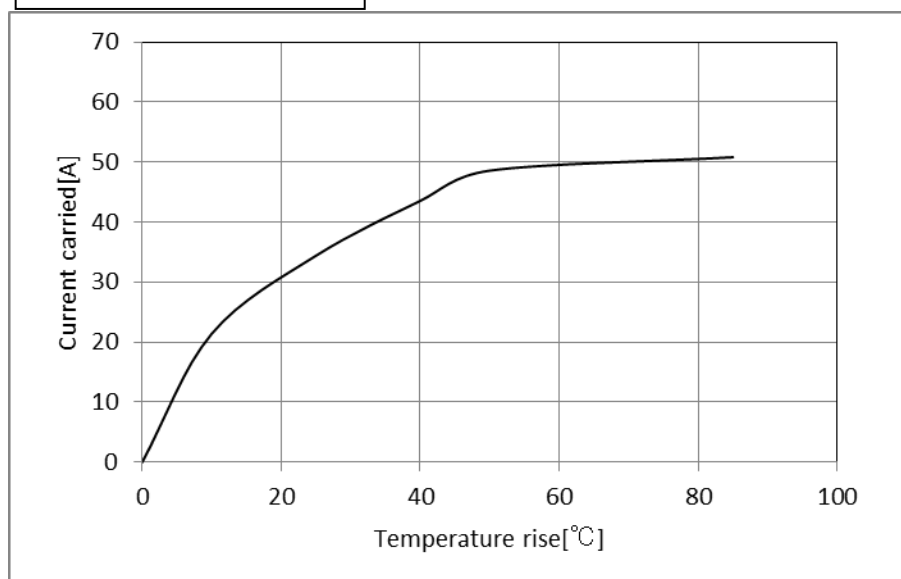
- Test specimen: Unused DF22-3P-7.92DS(05)  
 Unused DF22-3S-7.92C(28)  
 Unused DF22A-1012SCF
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.  
 (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

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Specification sheet

Part no.

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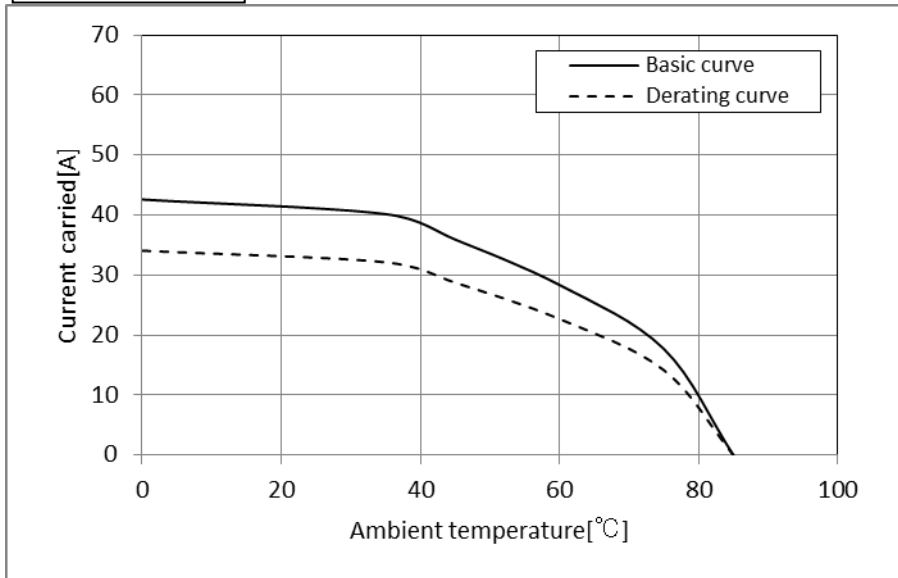


(Note 7) Measurement method of derating curve is shown below.

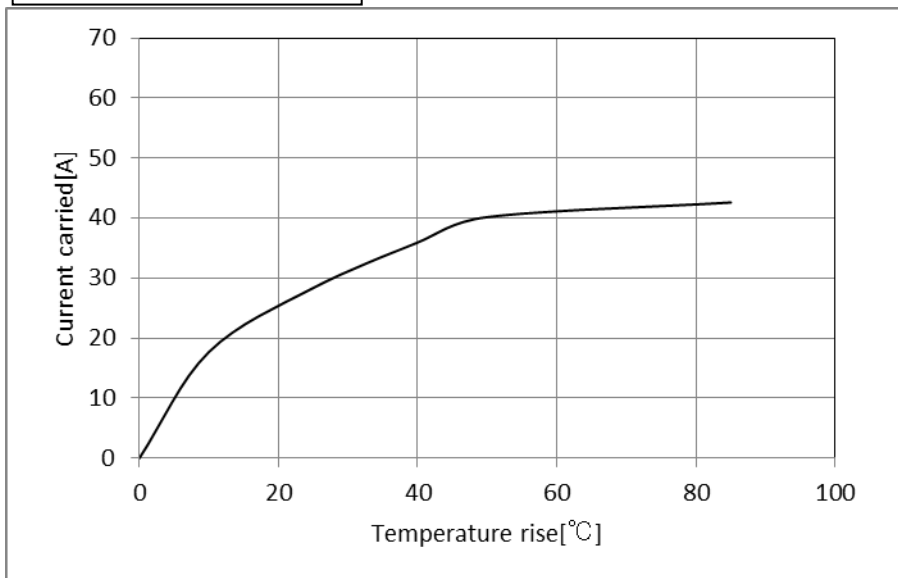
- Test specimen: Unused DF22-3P-7.92DS(05)  
 Unused DF22-3S-7.92C(28)  
 Unused DF22A-1012SCF
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.  
 (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		Drawing no. ELC-163023-35-00	
<b>HRS</b>	Specification sheet	Part no.	DF22-2P-7.92DS (35)
	Hirose electric co., Ltd.	Code no.	CL680-1008-5-35  3/5

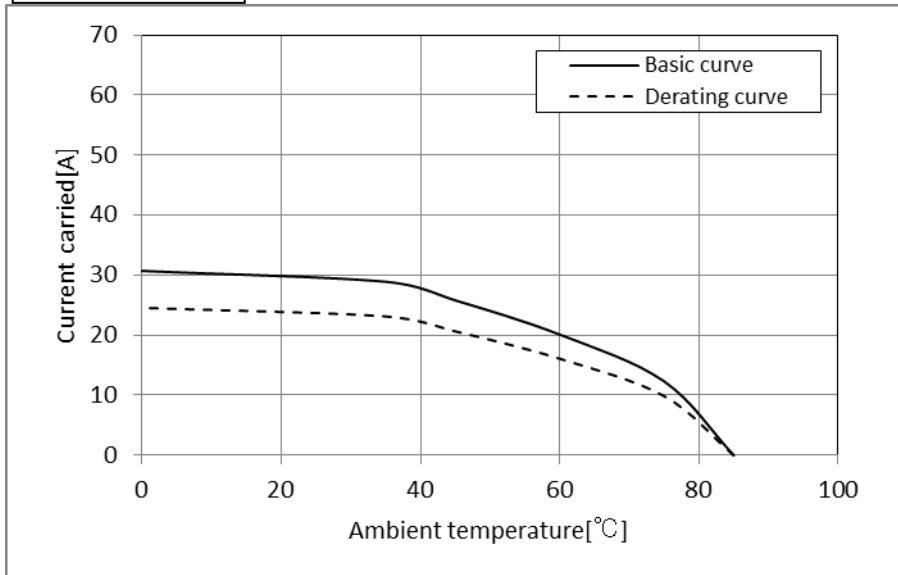


(Note 8) Measurement method of derating curve is shown below.

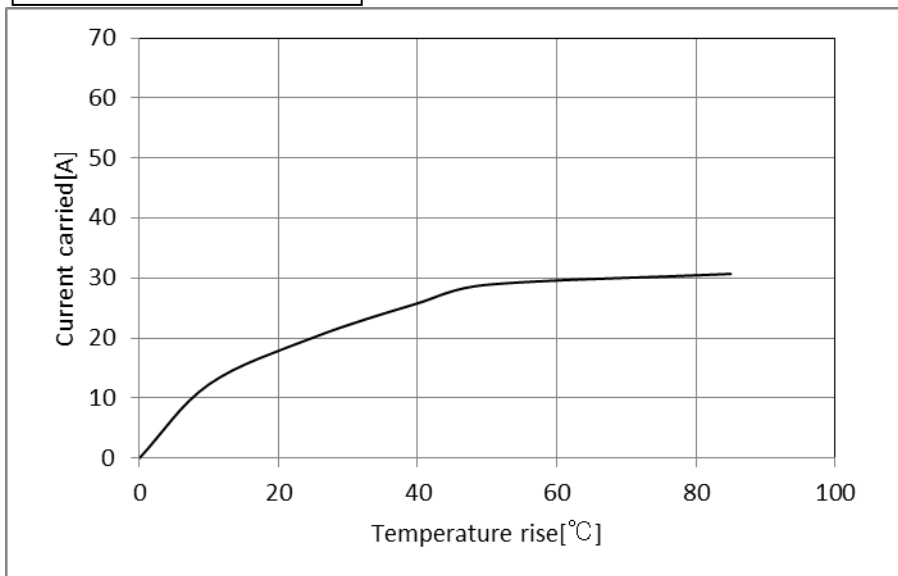
- Test specimen: Unused DF22-3P-7.92DS(05).  
 Unused DF22-3S-7.92C(28)  
 Unused DF22A-1416SCF
- Test cable spec: AWG 14
- Test condition: Turn on electricity under the static state and measure.  
 (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

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Specification sheet

Part no.

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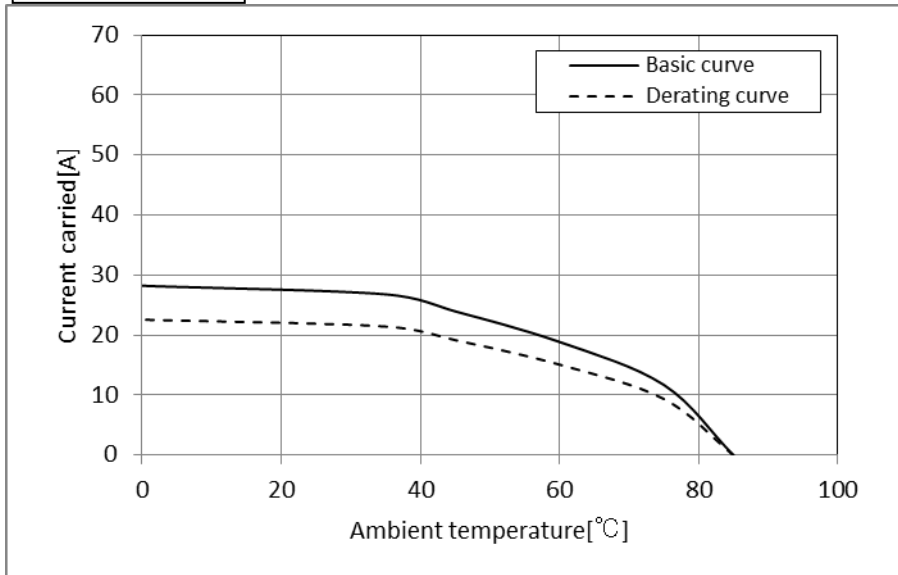


(Note 9) Measurement method of derating curve is shown below.

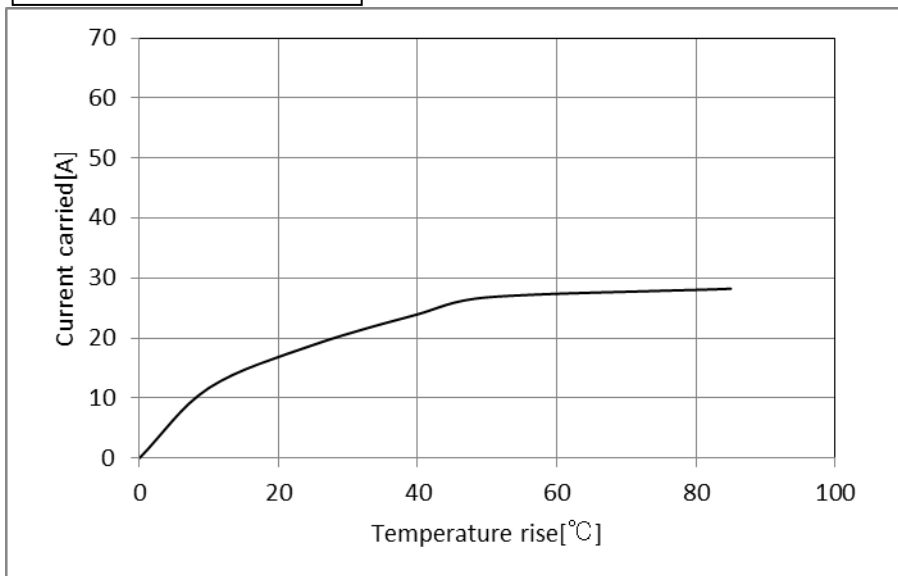
- Test specimen: Unused DF22-3P-7.92DS(05).  
 Unused DF22-3S-7.92C(28)  
 Unused DF22A-1416SCF
- Test cable spec: AWG 16
- Test condition: Turn on electricity under the static state and measure.  
 (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-163023-35-00



Specification sheet

Part no.

DF22-2P-7.92DS (35)

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Code no.

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