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Applicable standard										
RATING	Operating temperature range ⚠1	-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	DF22R-*S-7.92C(28) DF22#R-*S-7.92C			
	Current(*1) ⚠1	Contact	1	2,3	4,5	Current(*2) ⚠1	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

⚠1	RATED VOLTAGE	RATED CURRENT	OVERVOLTAGE CATEGORY	IP- DEGREE
UL	600V AC/DC	SEE ABOVE LEFT (*1) (AT AMBIENT TEMP.25℃)(NOTE 5)	—	—
C-UL	600V AC/DC	SEE ABOVE RIGHT(*2) (TEMP. RISE UP 30℃MAX)	—	—
TÜV	600V AC/DC	SEE ABOVE RIGHT(*2)	Ⅲ	IP00

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^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	—

	Count	Description of revisions	Designed	Checked	Date
⚠1	15	DIS-H-00002541	TS.KUMAZAWA	TS.FUKUSHIMA	17.05.31

Approved	KJ.KATAYOSE	05.01.05
Checked	TY.OMA	05.01.05
Designed	HK.UMEHARA	05.01.05
Drawn	HK.UMEHARA	05.01.05

Unless otherwise specifid , refer to IEC 60512.

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

Drawing no. ELC-164636-05-01

HRS	Specification sheet	Part no.	DF22R-*P-7.92DSA(05)	
	Hirose electric co., ltd.	Code no.	CL680 ⚠1	1/13

FORM HD0011-2-1

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Specifications

Item	Test method	Requirements	QT	AT
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℃ for Immersion,duration : 10 sec . ②Manual soldering Soldering iron temperature : 350℃ 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.
Note2:No condensing
Note3: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.

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△1

(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.

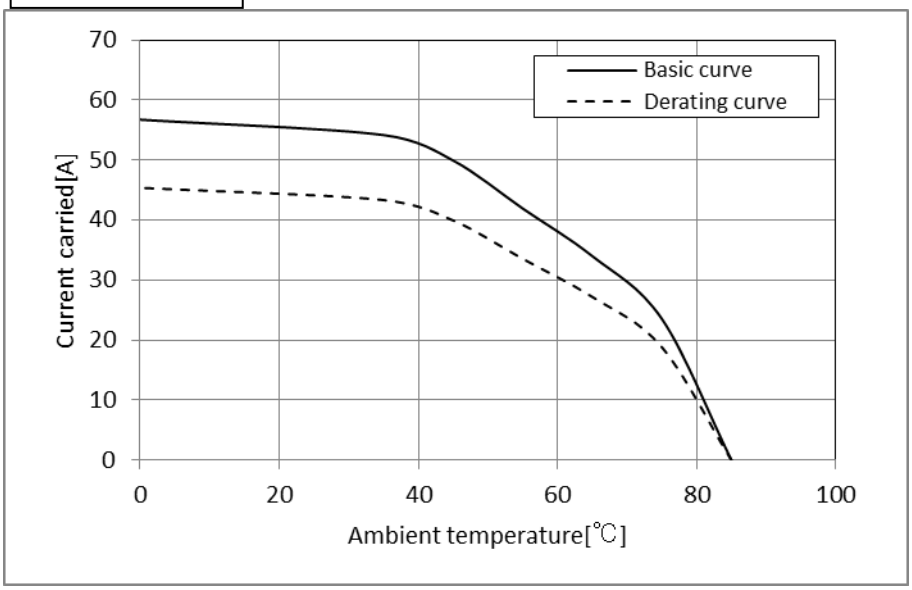
(Note 5)The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

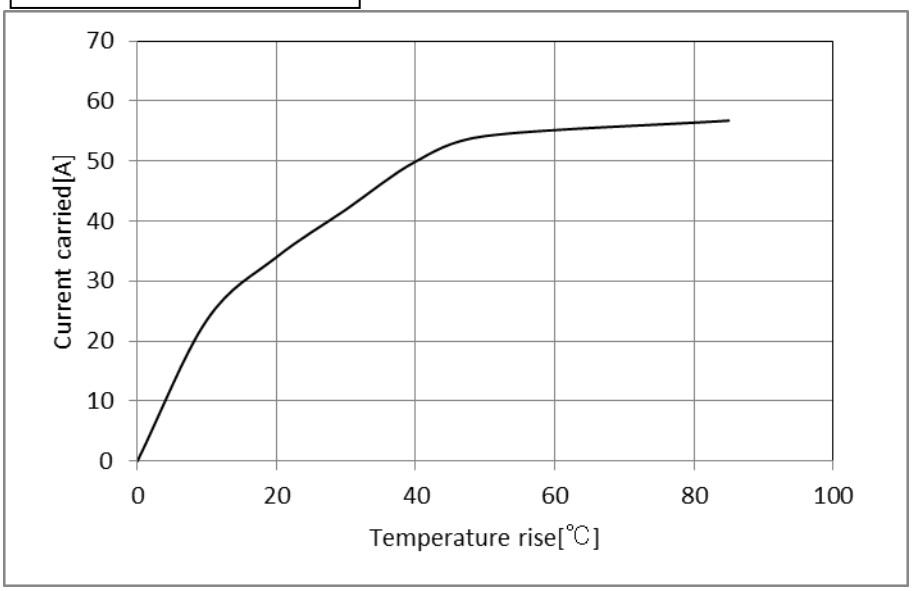
- Test specimen:Unused DF22-1P-7.92DS(05).
  Unused DF22-1S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 10
- Test condition: Turn on electricity under the static state and measure. (Test report # TR680E-20618)

[Reference]

Derating curve



Temperature rise curve



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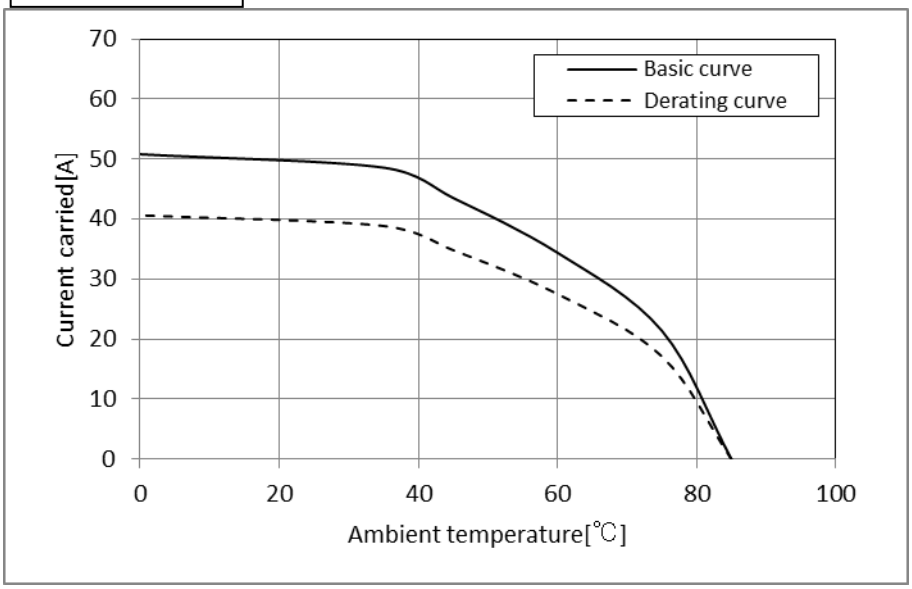
△1

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

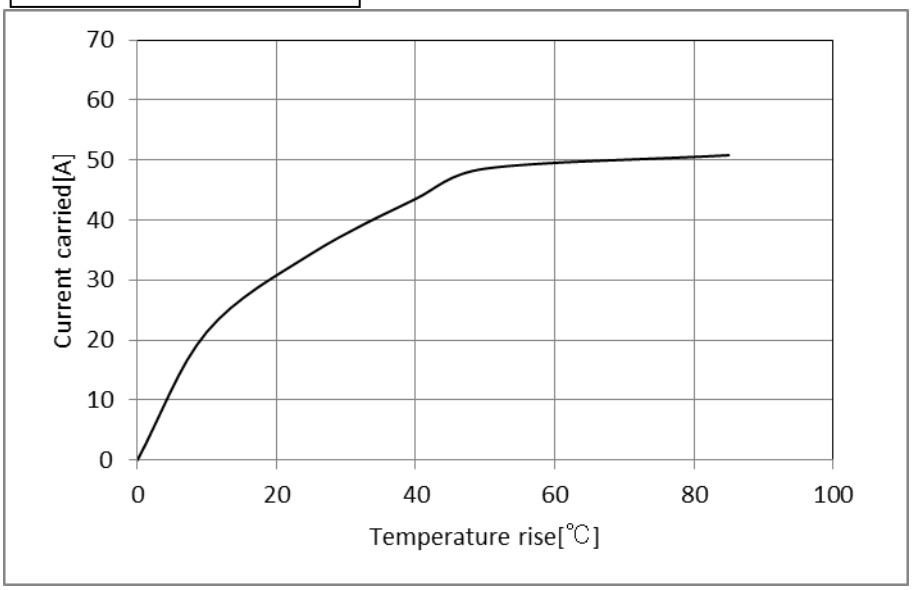
- Test specimen:Unused DF22-3P-7.92DS(05).
  Unused DF22-3S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 10
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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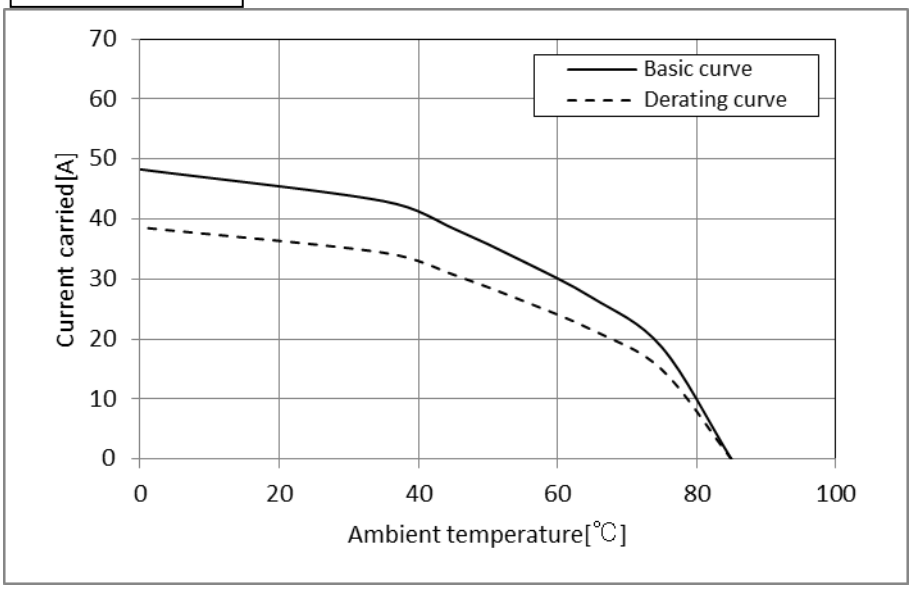
△1

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

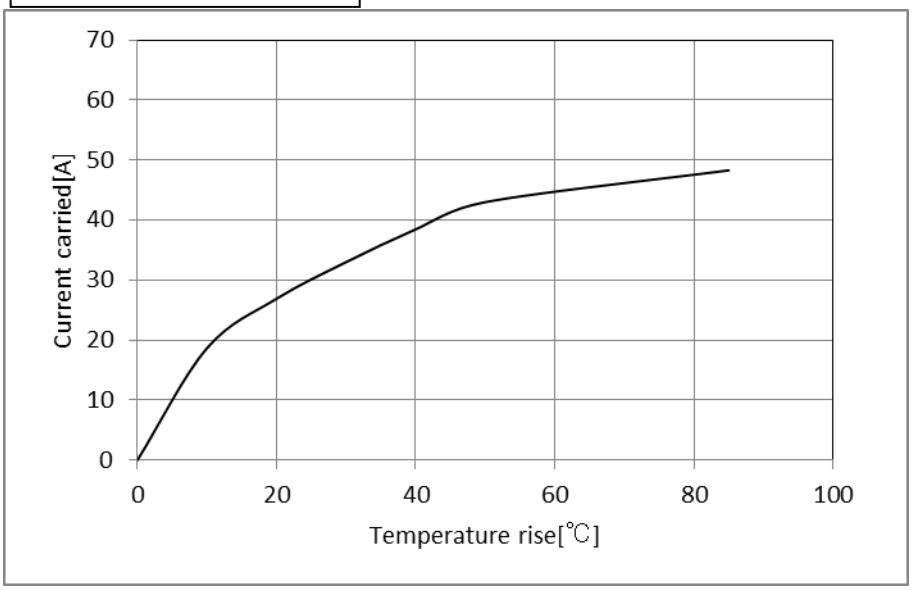
- Test specimen:Unused DF22-5P-7.92DSA(05).
  Unused DF22-5S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 10
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20587)

[Reference]

Derating curve



Temperature rise curve



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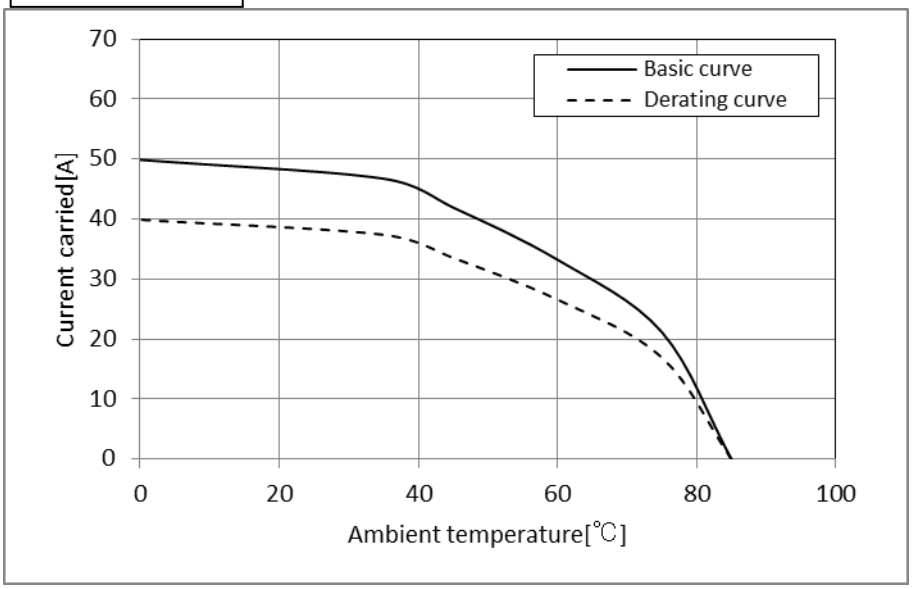
△1

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

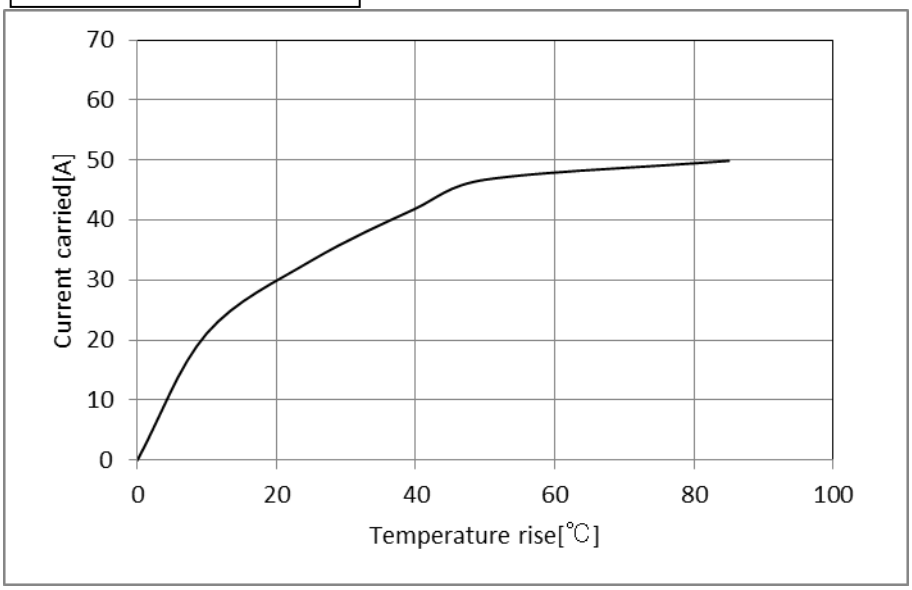
- Test specimen:Unused DF22-1P-7.92DSA(05).
  Unused DF22-1S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 12
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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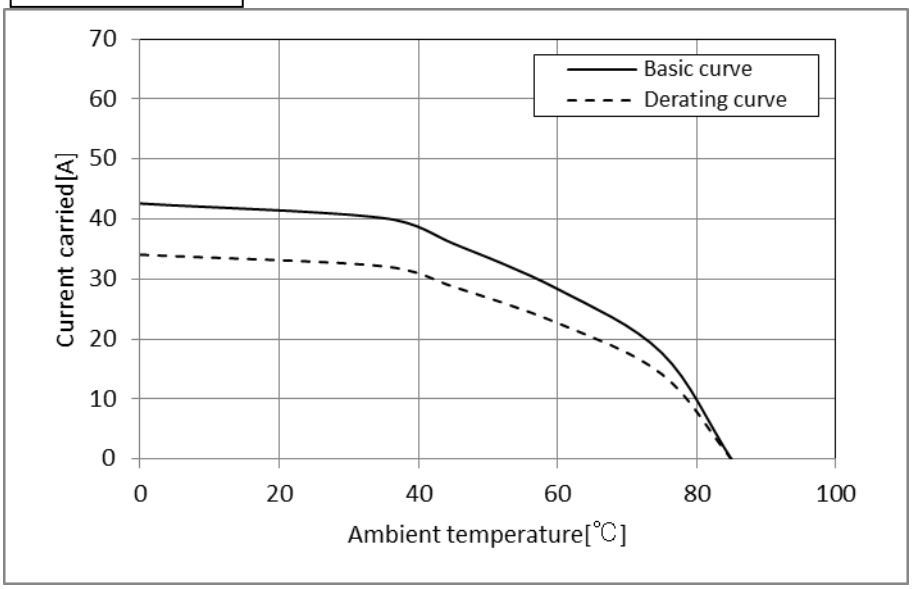
△1

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

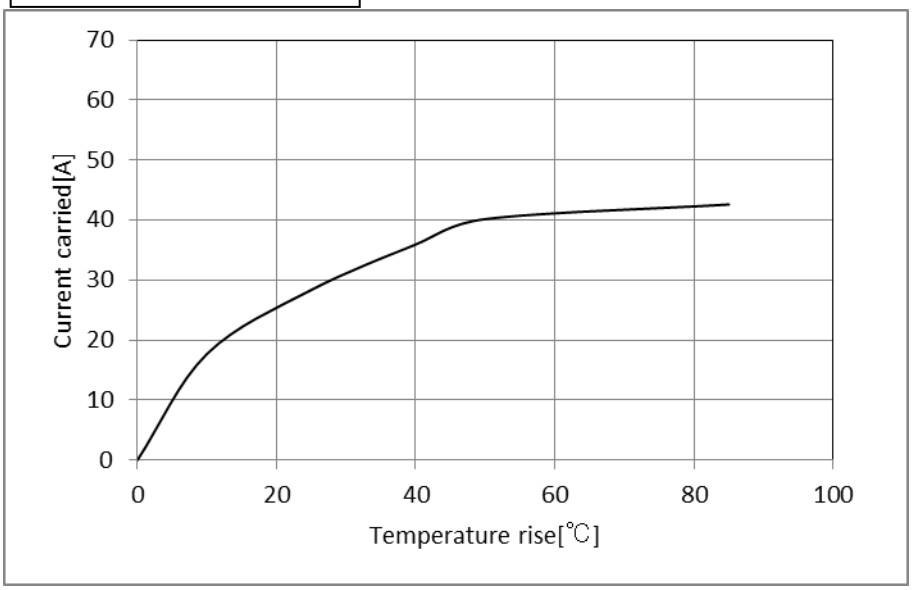
- Test specimen:Unused DF22-3P-7.92DS(05).
  Unused DF22-3S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 12
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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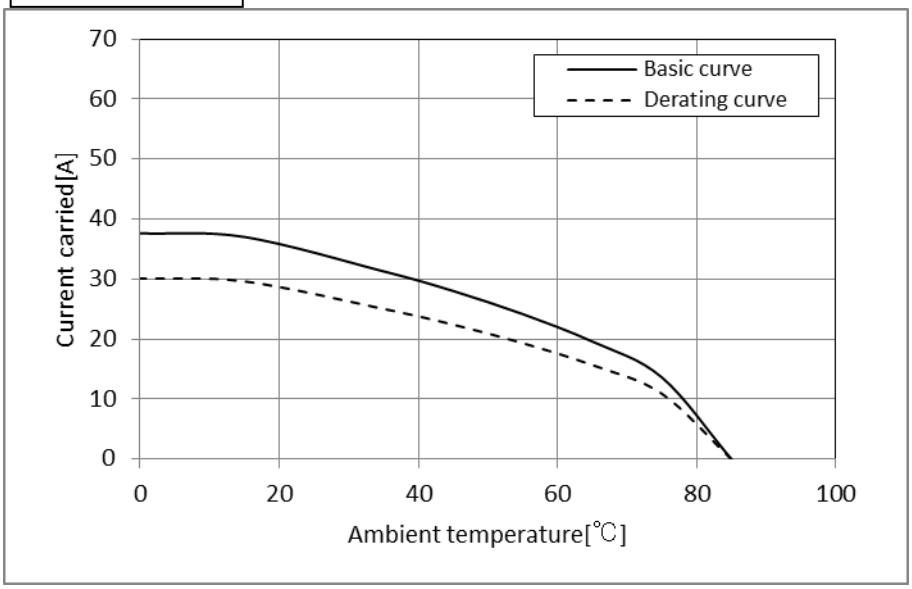
△1

(Note 11) Measurement method of derating curve is shown below.

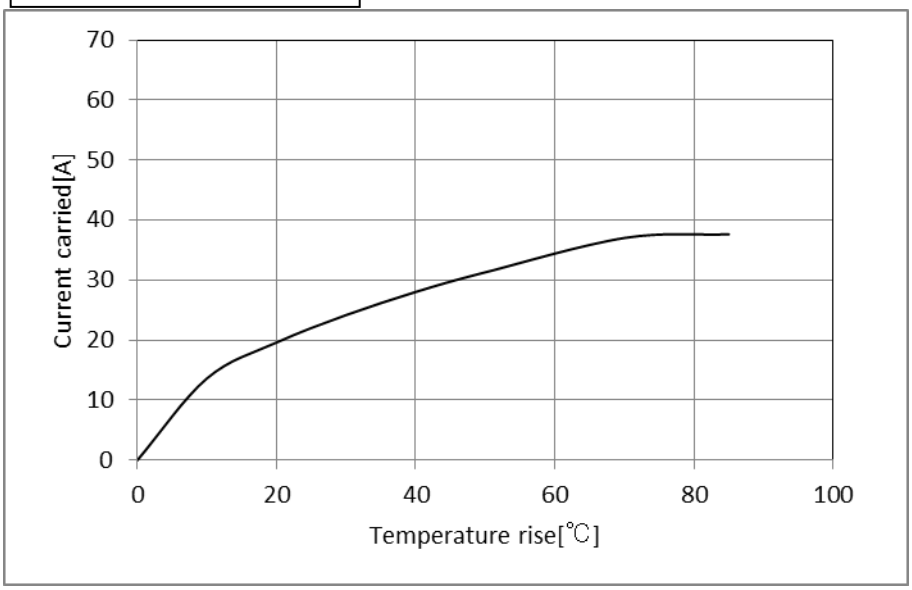
- Test specimen:Unused DF22-5P-7.92DSA(05).
  Unused DF22-5S-7.92C(28)
  Unused DF22A-1012SCF
- Test cable spec:AWG 12
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20810)

[Reference]

Derating curve



Temperature rise curve



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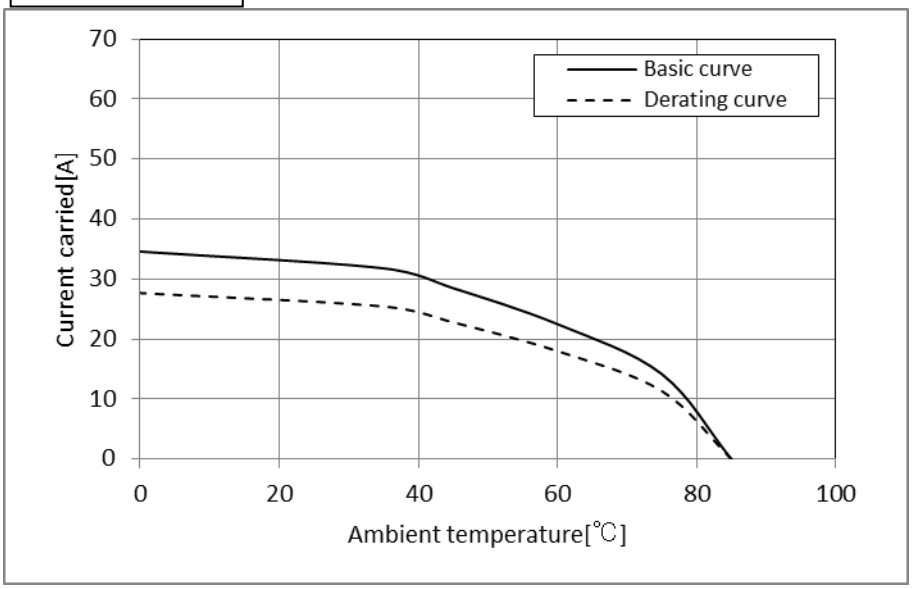
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(Note 12) Measurement method of derating curve is shown below.

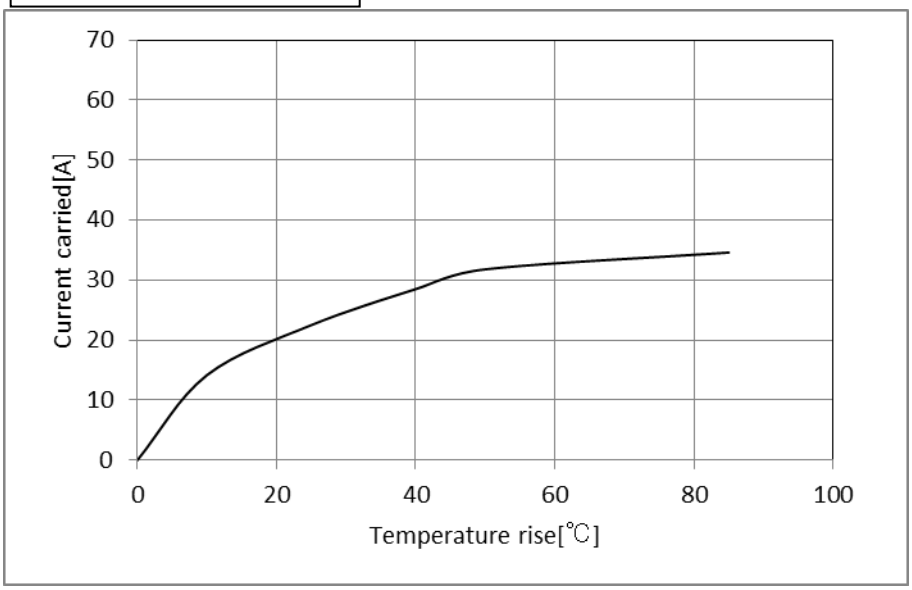
- Test specimen:Unused DF22-1P-7.92DSA(05).
  Unused DF22-1S-7.92C(28)
  Unused DF22A-1416SCF
- Test cable spec:AWG 14
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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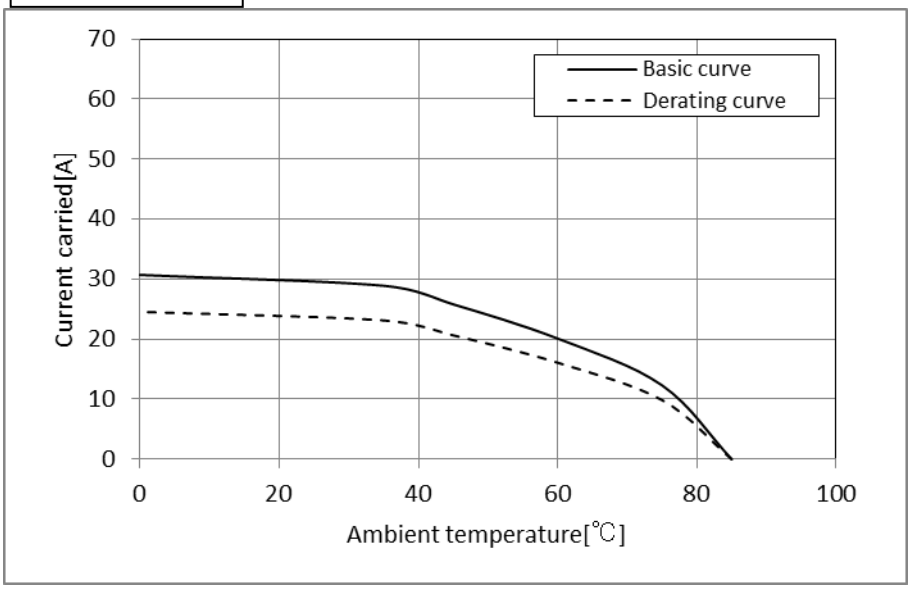
△1

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

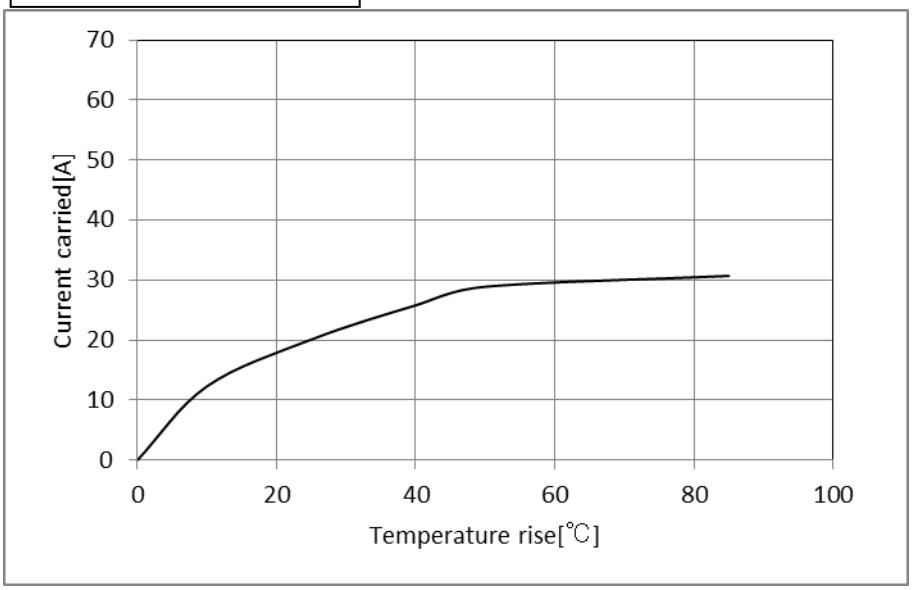
- Test specimen:Unused DF22-3P-7.92DS(05).
  Unused DF22-3S-7.92C(28)
  Unused DF22A-1416SCF
- Test cable spec:AWG 14
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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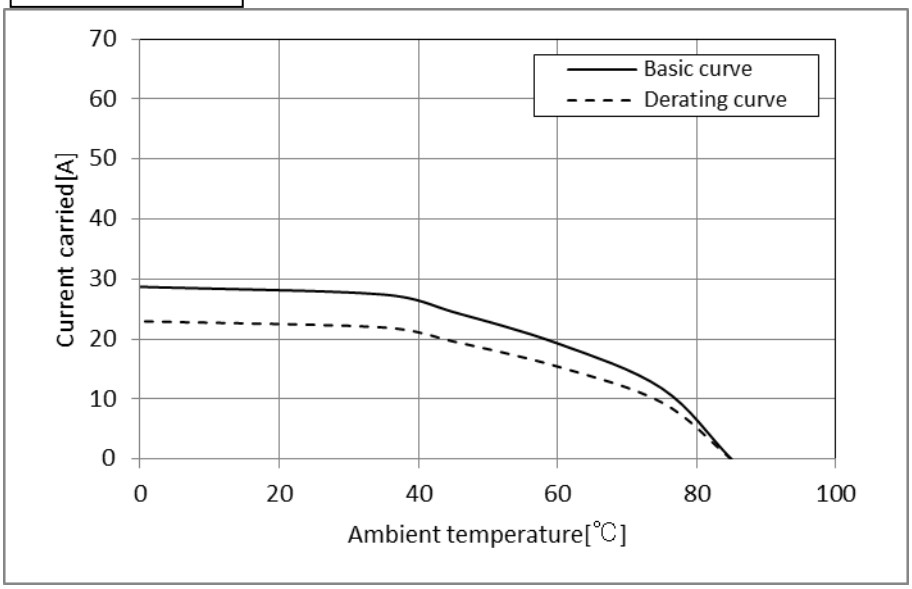
△1

(Note 14) Measurement method of derating curve is shown below.

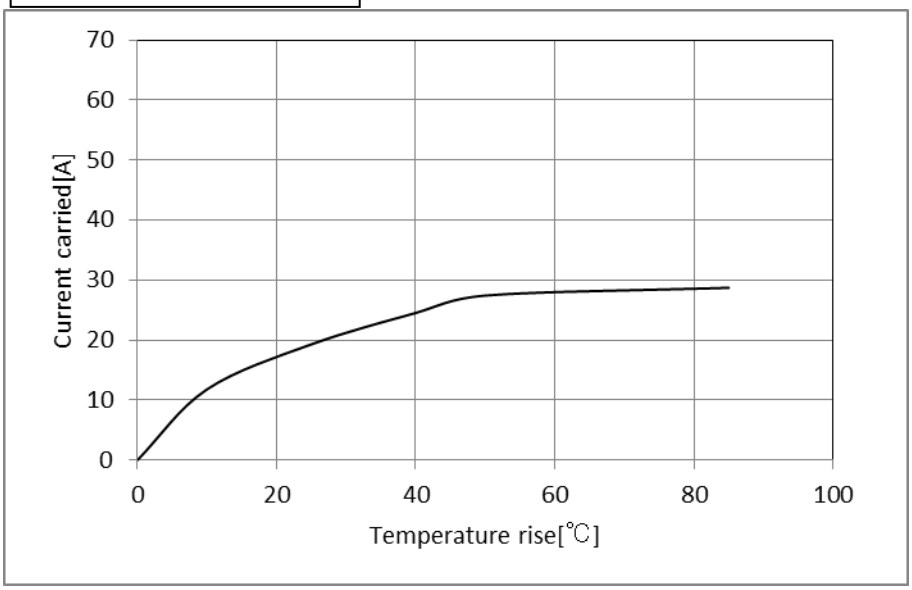
- Test specimen:Unused DF22-5P-7.92DS(05).
  Unused DF22-5S-7.92C(28)
  Unused DF22A-1416SCF
- Test cable spec:AWG 14
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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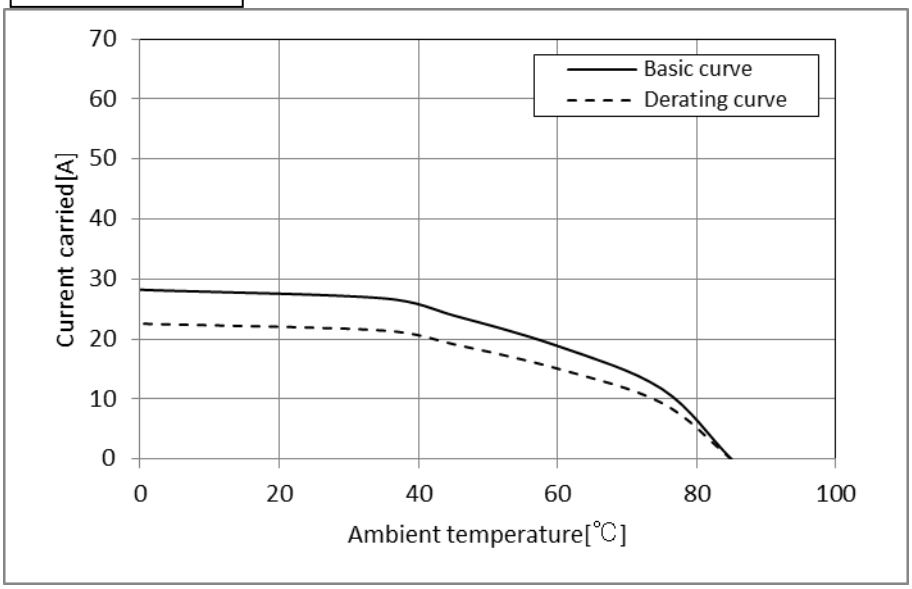
△1

(Note 15) Measurement method of derating curve is shown below.

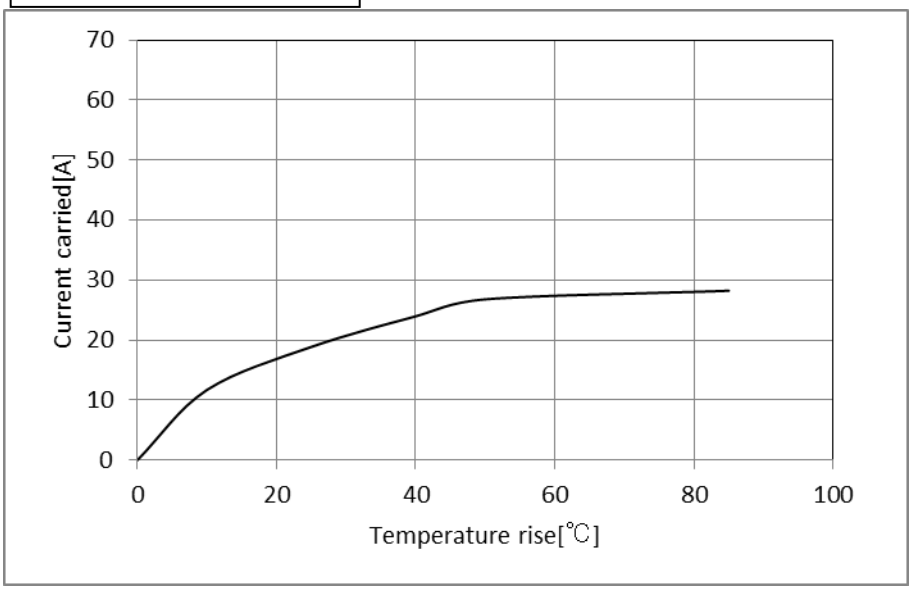
- Test specimen:Unused DF22-3P-7.92DS(05).
  Unused DF22-3S-7.92C(28)
  Unused DF22A-1416SCF
- Test cable spec:AWG 16
- Test condition: Turn on electricity under the static state and measure.
  (Test report # TR680E-20855)

[Reference]

Derating curve



Temperature rise curve



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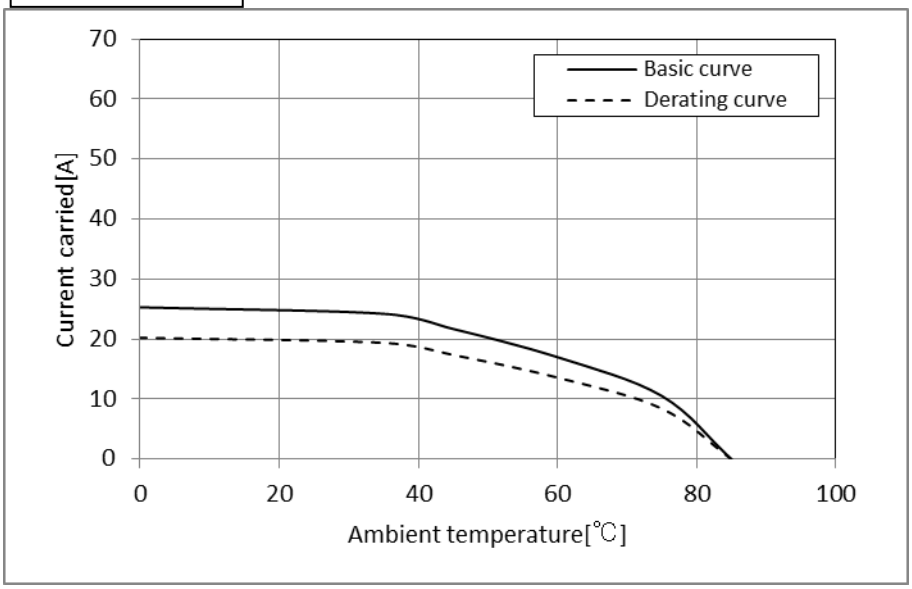
△1

(Note 16) 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

