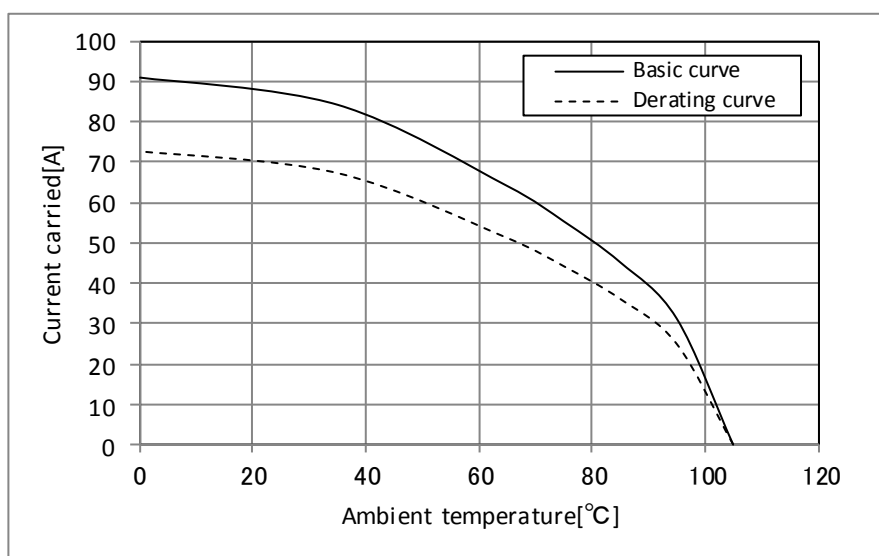


Applicable standard							
Rating	Operating temperature range	-55°C to + 105°C (Note 1)		Storage temperature range	-10°C to + 60°C (Note 3)		
	Operating humidity range	20% to 80% (Note 2)		Storage humidity range	40% to 70% (Note 3)		
	Applicable connector	DF60 (A) -2S-10. 16C (##) DF60-*SCFA		Current(*1)	45 A		
				Voltage	1000V AC/DC		
	Rated voltage	Rated current		Overvoltage category		IP- degree	
UL	600V AC/DC	65A (At ambient temp. 25°C) (Note 5)		—		—	
C-UL	600V AC/DC	See above(*1) (Temp. rise up 30°C MAX)		—		—	
TÜV	600V AC/DC	See above(*1)		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		DC6V MAX, 1A		2mΩ MAX.		X —	
Insulation resistance		1000V DC.		1000MΩ MIN.		X —	
Voltage proof		3000V AC for 1 min.		No flashover or breakdown.		X —	
Mechanical characteristics							
Mechanical operation		30 times insertions and extractions.		① Contact resistance: 2mΩ MAX. ② No damage, crack or looseness of parts.		X —	
Vibration		Frequency 10 to 500 Hz, total amplitude 1.5 mm, acceleration of 98 m/s ² , 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							
Damp heat (Steady state)		Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.		① Contact resistance: 2mΩ MAX. ② Insulation resistance: 1000MΩ MIN. ③ No damage, crack or looseness of parts.		X —	
Rapid change of temperature		Temperature -55°C → +85°C Time 30min → 30min Under 25 cycles. (The transferring time of the tank is 2-3 min) (After leaving the room temperature for 1-2h.)		① Contact resistance: 2mΩ MAX. ② Insulation resistance: 1000MΩ MIN. ③ No damage, crack or looseness of parts		X —	
Dry heat		Exposed at 105 ± 2°C, 250h (After leaving the room temperature for 1-2h.)		① Contact resistance: 2mΩ MAX. ② Insulation resistance: 1000MΩ MIN. ③ No damage, crack or looseness of parts		X —	
Resistance to soldering heat		① Solder bath method $\triangle 3$ Solder temperature : 260°C for Immersion, duration : 10 sec . ② Manual soldering Soldering iron temperature : 350±10°C Soldering time : 5 sec. No strength on contact.		Such as impaired function ,no deformation of case of excessive looseness of the terminals. $\triangle 3$		X —	
Solderability		Soldered at solder temperature, 245°C for insertion duration, 5sec.		Solder shall cover a minimum of 95 % of the surface being immersed.		X —	
Remarks							
Note1: Include the temperature rising by current.							
Note2: No condensing.							
Note3: 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.							
$\triangle 3$	Count	Description of revisions		Designed		Checked	Date
	3	DIS-H-00005418		TS. MIYAKI		SZ. ONO	20191022
Unless otherwise specifid , refer to IEC 60512.				Approved	KI. AKIYAMA		20150603
				Checked	TS. FUKUSHIMA		20150602
				Designed	TS. KUMAZAWA		20150602
				Drawn	TS. KUMAZAWA		20150602
Note QT:Qualification Test AT:Assurance Test X:Applicable Test				Drawing no.		ELC-342144-27-00	
HRS	Specification sheet			Part no.		DF60-2P-10. 16DS (27)	
	Hirose electric co., ltd.			Code no.		CL680-3016-4-27	$\triangle 3$ 1/2

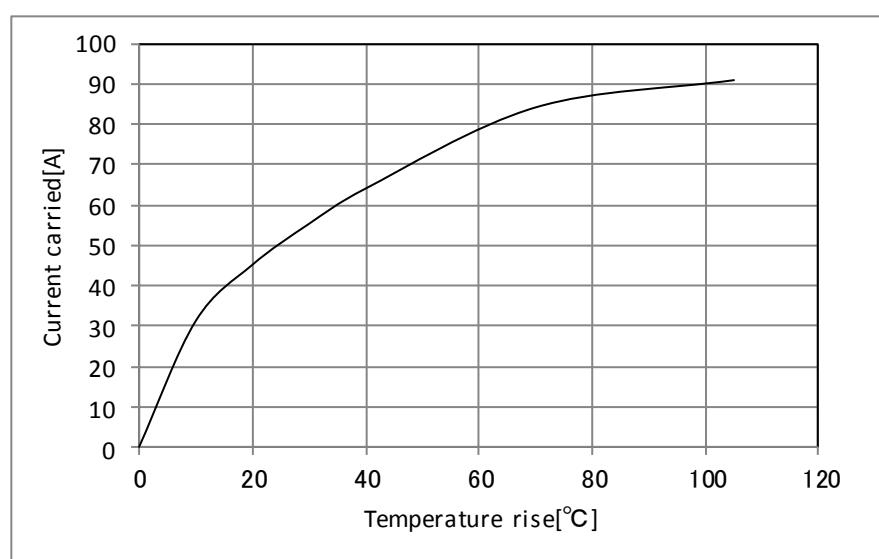
- (Note 4) Derating curve takes manufacturing tolerances into consideration as well as uncertainties in temperature measurement and the measuring set up and is derived from the basic curve multiplied by 0.8 calculation.
- (Note 5) Indicates the current that corresponds to the RTI value (temperature at which performance is halved) of the resin when the ambient temperature is 25°C. 
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 DF60-2P-10.16DS(27).
Unused DF60-2S-10.16C
Unused DF60-8SCFA
 - Test cable spec: AWG 8
 - Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20766)

[Reference]

Derating curve



Temperature rise curve



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

Drawing no.

ELC-342144-27-00

HRS

Specification sheet

Part no.

DF60-2P-10.16DS (27)

Hirose electric co., Ltd.

Code no.

CL680-3016-4-27



2/2