HPK SERIES SPDT 35 Amp

c UL us
File No.:E75887

PENDING

RoHS Compliant

FEATURES

- 25A, 32A or 35A switching capability
- Surge voltage up to 6kV (between coil and contacts)
- 1 Form C and 1 Form A configurations available
- Dust Cover Type, Flux Free Type and Sealed Type is available
- Creepage Distance up to 6mm
- Outline Dimensions: 21.6mm×16.0mm×20.6mm

CONTACT RATINGS

Contact Arrangement	1A, 1B, 1C
Contact Resistance	100mΩ (1A 24VDC)
Contact Material	AgSnO alloy
Contact Rating(Resistive)	NO:35A/277VAC NC:16A/277VAC
Max. Switching Voltage	277VAC
Max. Switching Current	35A
Max. Switching Power	9695VA
Mechanical Life	1×10^5 operations(frequency 9,000 operations/hr)
Electrical Life	See more details at "safety approval ratings"

ORDERING INFORMATION

HPK F 1C 35 DC12 - E - 1.5 - XXXX

- Model
- F:Class F H:Class H
- 1A:1 Form A 1B:1 Form B
  1C:1 Form C
- 35:35A
- Coil Voltage
- C:Dust Cover Type S:Sealed Type E:Flux Free Type
- Contact Gap: Nil=Standard gap 1=1mm(Only for A)
  1.5=1.5mm(Only for A) 2=2.1mm(Only for A)
- Customer code

CHARACTERISTICS

Insulation Resistance		100MΩ (at 500VDC)
Dielectric Strength	Between coil & contacts	4000VAC 1min
	Between open contacts	1500VAC 1min
Operate time (at nomi. volt.)		≤15ms
Release time (at nomi. volt.)		≤10ms
Humidity		85% (20°C)
Storage Condition		-40°C~+85°C
Operating Condition		Class F: -40°C~+60°C Class H: -40°C~+85°C -40°C~+105°C(at 25A)
Class F/H		Insulation System Class F/H
Shock Resistance	Operating extremes	10G
	Damage limits	100G
Vibration resistance		10Hz ~ 50Hz 1.0mm DA
Unit weight		Approx. 15g
Construction		Sealed Type, Dust Cover Type, Flux Free Type

COIL DATA at 25°C

Nominal Voltage VDC	Pick-up Voltage (Max.) VDC(1)	Drop-out Voltage (Min.) VDC	Holding Voltage at 85°C VDC(2)	Coil Resistance Ω±10%
6	4.8	0.30	1.92~2.16	22
9	7.2	0.45	2.88~3.24	49
12	9.6	0.60	3.84~4.32	86
24	19.2	1.20	7.68~8.64	345
48	38.4	2.40	15.36~17.28	1380

Notes:1) The data shown above are initial values.
2) Please find coil temperature curve in the characteristic curved below.

This datasheet is for customers' reference. All the specifications are subject to change without notice.

COIL

Power consumption at rated voltage	1670mW
Power consumption at holding voltage	190mW(2)

Notes:

(1) To energize relay properly apply 100%~120% nominal coil voltage for 200ms.

(2) Coil holding voltage is 32~36% of nominal voltage after applying nominal voltage for 200ms.

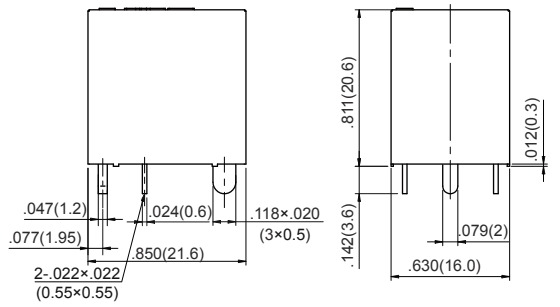
SAFETY APPROVAL RATINGS

UL&CUL	NO:35A/277VAC, 70°C, 5×10^4 OPS 32A/277VAC, 85°C, 3.4×10^4 OPS 25A/277VAC, 105°C, 5×10^4 OPS 25A/35VDC, 40°C, 5×10^4 OPS 5A/120VAC E.Ballast, 40°C, 6×10^3 OPS TV-8 277VAC NC:16A/277VAC, 40°C, 7×10^3 OPS 16A/277VAC, 85°C, 1.5×10^4 OPS 32A Carry Current	
TüV	PENDING	NO:35A/277VAC NC:16A/277VAC

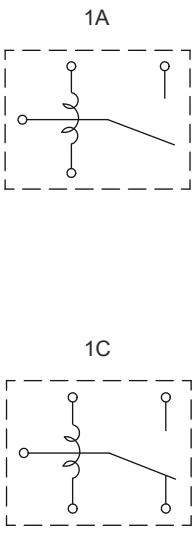
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT.

Unit: inch(mm)

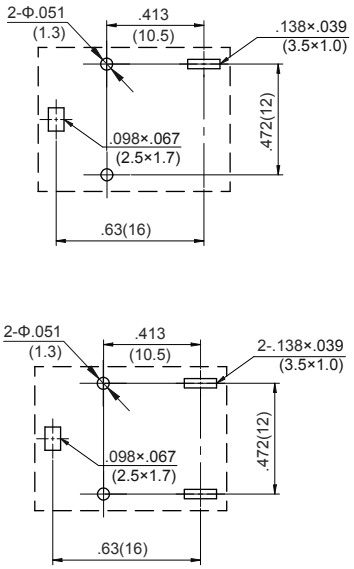
Outline Dimensions



Wiring Diagram (Bottom view)



PCB Layout (Bottom view)



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm,tolerance should be ±0.2mm; outline dimension ＞1mm and ≤5mm,tolerance should be ±0.3mm;outline dimension ＞5mm, tolerance should be ±0.4mm.

2) The tolerance without indicating for PCB layout is always ±0.1mm.

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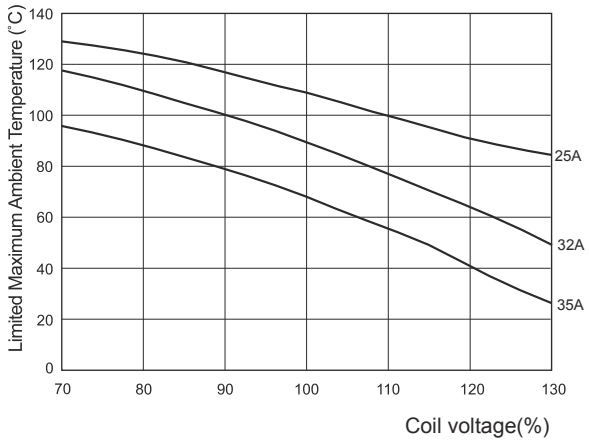
CHARACTERISTIC CURVES

Coil operating rang (DC)



Operate time / Release time