

Type NHQT Specification

Surface mount chip 0402 size

Description

A range of 0402 size surface mount NTC chip thermistors. The terminations are nickel barrier with solder plating.

General

Soldering Recommendations

- Maximum storage time in closed package: One year
- Maximum storage time exposed to ambient conditions of 59°F to 86°F (15°C to 30°C), 15% to 70% RH: 30 days
- Drying prior to soldering: Not to exceed 48h at 176°F (80°C) or 16h at 212°F (100°C) or 8h at 257°F (125°C)
- Flux type: R or RMA

Flow Soldering Conditions

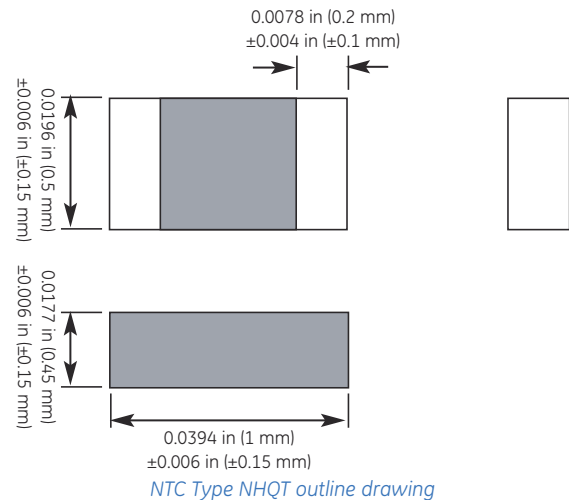
- Preheat temperature: 176°F to 302°F (80°C to 150°C)
- Maximum rate of temperature change: 4.5°F/s or 2.5°C/s
- Maximum solder temperature: 509°F (265°C)
- Maximum dwell time: 10 seconds
- Cooling in ambient or air flow of 5m/s

Reflow Soldering Conditions

- Method infrared, hot gas, vapor
- Maximum rate of preheat temperature change: 4.5°F/s or 2.5°C/s
- Maximum temperature: 437°F (225°C)
- Maximum time above: 392°F (200°C) 30 seconds
- Maximum radiant flux: (0.1 to 100 W/μ) 5 W/cm²
- Maximum hot air temperature: 527°F (275°C) at 4 m/s
- Maximum vapor temperature: 419°F (215°C)
- Maximum rate of cooling: 4.5°F/s or 2.5°C/s

Cleaning

Ultrasonic cleaning in methanol or isopropanol not exceeding 40 kHz for 5 minutes, or aqueous cleaning not exceeding 158°F (70°C) for 7 minutes (recommended).



Code	R25 Ω	B (25/85) K
NHQT400B285R5	40	2850
NHQT500B285R5	50	2850
NHQT600B285R5	60	2850
NHQT101B285R5	100	2850
NHQT151B285R5	150	2850
NHQT102B330R5	1000	3300
NHQT202B410R5	2000	4100
NHQT252B410R5	2500	4100
NHQT302B410R5	3000	4100
NHQT332B410R5	3300	4100
NHQT352B410R5	3500	4100
NHQT402B410R5	4000	4100
NHQT652B410R5	6500	4100
NHQT153B380R5	15000	3800
NHQT203B380R5	20000	3800
NHQT223B380R5	22000	3800
NHQT303B400R5	30000	4000
NHQT473B400R5	47000	4000
NHQT683B400R5	68000	4000
NHQT104B425R5	100000	4250
NHQT154B425R5	150000	4250
NHQT204B425R5	200000	4250

Data

- Resistance tolerance at 77°F (25°C) ±5%; for ±10% replace R5 by R10 in code.
- Tolerance on B value ±200 K
- Minimum temperature: -40°F (-40°C)
- Maximum temperature: 257°F (125°C)
- Dissipation factor: 1.5 mW/K
- Time constant: 4 seconds maximum