

Type NHQMM Specification

Surface mount chip 0603 size

Description

A range of 0603 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

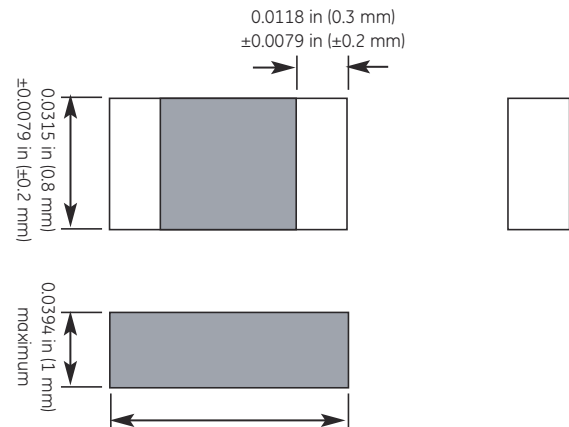
- Preheat temperature: 176°F to 302°F (80°C to 150°C)
- Maximum rate of temperature change: 4.5°F/s or 2.5°C/s
- Maximum solder temperature: 509°F (265°C)
- Maximum dwell time: 10 seconds
- Cooling in ambient or air flow of 5m/s

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).



NTC Type NHQMM outline drawing

Code	R25 Ω	B (25/85) K
NHQMM300B275R5	30	2750
NHQMM400B280R5	40	2800
NHQMM680B280R5	68	2800
NHQMM800B280R5	80	2800
NHQMM101B280R5	100	2800
NHQMM471B320R5	470	3200
NHQMM501B320R5	500	3200
NHQMM102B325R5	1000	3250
NHQMM152B345R5	1500	3450
NHQMM202B410R5	2000	4100
NHQMM222B410R5	2200	4100
NHQMM252B410R5	2500	4100
NHQMM302B410R5	3000	4100
NHQMM332B410R5	3300	4100
NHQMM472B355R5	4700	3550
NHQMM502B355R5	5000	3550
NHQMM682B355R5	6800	3550
NHQMM103B375R5	10000	3750
NHQMM153B380R5	15000	3800
NHQMM203B380R5	20000	3800
NHQMM223B380R5	22000	3800
NHQMM303B400R5	30000	4000
NHQMM333B400R5	33000	4000
NHQMM473B400R5	47000	4000
NHQMM503B400R5	50000	4000
NHQMM683B400R5	68000	4000
NHQMM104B415R5	100000	4150
NHQMM154B425R5	150000	4250
NHQMM204B425R5	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: 1.2 mW/K
- Time constant: 4 seconds maximum