Maximum Tip Temperature For Smartheat® Soldering Cartridges and Tips

SmartHeat® Technology is unique in that it senses the specific thermal demand directly at the solder pad and delivers the precise quantity and flow of thermal energy during both flux activation and intermetallic bonding phases without any adjustment and calibration. SmartHeat® is radically different and provides users the only fully safe and thermally effective soldering lead free solution.

Conventional technology senses and responds to the tip temperature and not the thermal energy demand of the solder joint and users are required to calibrate their systems regularly. In today's lead free environment, the conventional technology is thermally inefficient to produce good quality solder joints consistently and leaves process control in the hands of the individual operators.

Good quality joints are a result of precise quantity and flow of thermal energy and not tip temperature. Fixed temperature cartridges and tips offer users a fully safe and thermally effective solution to their lead free soldering needs as well as complete process control. Furthermore, fixed temperature cartridges and tips can offer better tip life because they can operate at a lower temperature than conventional technology. Please speak to our representatives on proper tip selection for your soldering applications.

Based on historical practices, we acknowledged that some of our customers have specific maximum temperature criteria to meet when choosing a tip/cartridge for a particular application.

The table on page 2 provides the max tip temperature for our soldering cartridges/tips.

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Serie	Part Number	Application	Max tip temperature
	METCAL		
500	STTC-5xx, SMTC-5xxx, SSC-5xx	Temperature Sensitive	575°F/302°C
600	STTC-0xx, PTTC-6xx, UFTC-6xxxx, SMTC-0xxx, TATC-6xx, SSC-6xx	Temperature Sensitive	675°F/357°C
700	STTC-1xx, PTTC-7xx, UFTC-7xxxx, SMTC-1xxx, STDC-1xx, STDC-7xx, SSC-7xx	FR4/Glass Fiber	775°F/412°C
	OKI		
650	PHT-65xxxx	Temperature Sensitive	680°F/360°C
750	PHT-75xxxx	FR4/Glass Fiber	780°F/416°C
T	STP-xxxx, STV-xxxx, TTP-xxx	Temperature Sensitive	690°F/365°C
F	SFP-xxxx, SFV-xxxx, RFP-xxx, TFP-xxx, DFP-xxx	FR4/Glass Fiber	790°F/421°C
C	SCP-xxxx, SCV-xxxx, RCP-xxx, TCP-xxx, DCP-xxx	Ceramic	860°F/460°C