

SPECIFICATION AND PERFORMANCE

Series	217C-AE05	File	217C-AE05_Spec_1	Date	2024/01/25
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Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of 217C-AE05

Performance and Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specification. Unless otherwise specified, all tests are performed at ambient environmental conditions.

RoHS:

All material in according with the RoHS environment related substances list controlled.

MATERIALS

NO.	PART NAME	DESCRIPTION
1	HOUSING	Thermoplastic, UL94V-0, Black
2	CONTACT	Copper alloy, 15u" gold plating on contact area, gold flash on solder area, nickel under plating over all
3	SHELL	Stainless Steel, Nickel plating
4	GLUE	EPOXY

RATING

Rated Current	5A
Rated Voltage	20VDC
Operating Temperature	-40°C to +85°C
Durability	10,000 cycles

ELECTRICAL

Item	Requirement	Test Condition
Low level Contact resistance	40mΩ max(initial) 10mΩ max change for post test	Subject mated contacts assembled in housing to 20mV max open circuit at 100mA max. EIA-364-23B
Dielectric withstanding voltage	No flashover& spark over & excess leakage & breakdown	Test voltage 100V AC between adjacent contacts of mated and unmated connector assemblies for one minute. Interval of shield case and contacts too, in the same way EIA-364-20B
Insulation resistance	Initial: 100 MΩ min. Final(post test) 100 MΩ min.	Test voltage 100±10V DC between adjacent contacts of mated and unmated connector assemblies interval of shield case and

		contacts too in the same way. EIA-364-21C
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MECHANICAL

Item	Requirement	Test Condition
Mating force	0.5~2Kgf	Measure force necessary to mate connector assemblies at maximum rate of 30cycles/min. EIA-364-13
Unmating force	0.8~2Kgf	Measure force necessary to mate connector assemblies at maximum rate of 30cycles/min. EIA-364-13
Durability	Mating force: 0.5~2Kgf Unmating force: 0.8~2Kgf Contact resistance:10mΩ max change for post test appearance :no breakdown	Mate and unmated connector assemblies for 10,000 cycles at. Cycle rate of 500 cycles per hour if done EIA-364-09

ENVIRONMENTAL

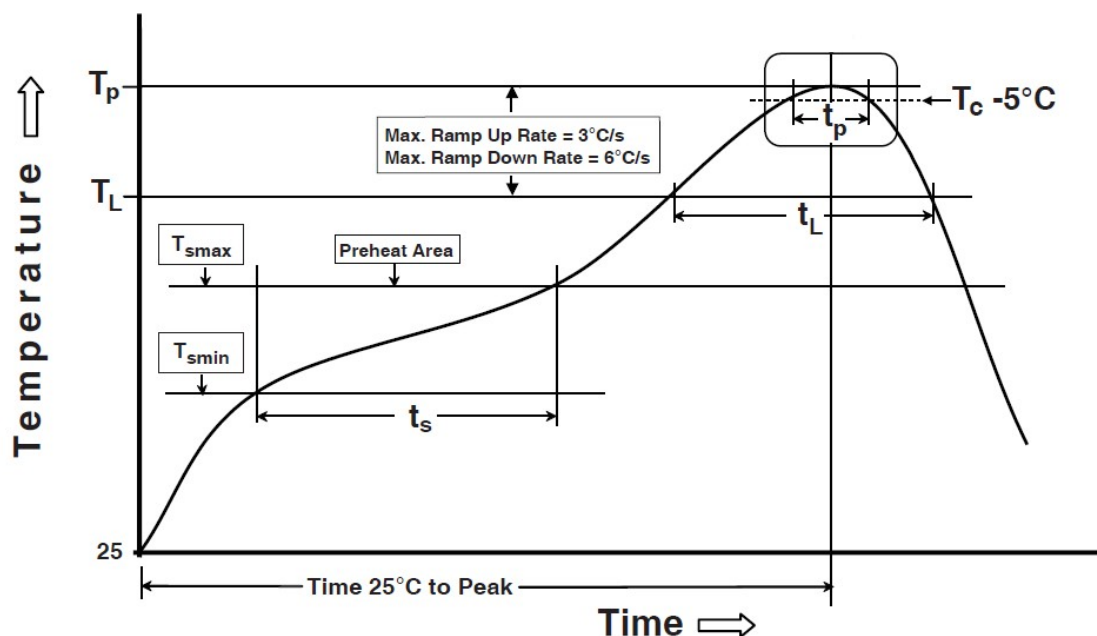
Item	Requirement	Test Condition
Thermal shock	Contact resistance:10mΩ max Change for post test	Mated connector -40±3°C(30minutes),+85±2°C(30minutes) Perform this 1 cycle ,repeat 10 cycles EIA-364-32C condition 1
Humidity	Withstand voltage: no breakdown Insulation resistance: 100 MΩ Min. Contact resistance: 10mΩ max. change for post test Appearance :no breakdown	Mated connector 25~65°C, 90~95% RH, 1 cycle:24 hours, 4cycles EIA-364-31B
Degree of protection	No significant change in pressure < 30 Pa	Test pressure: 15kPa~17kPa Test duration: 5 second

SOLDER ABILITY

Item	Requirement	Test Condition
Solder-ability	Solder tails shall pass 95% min coverage	Solder temperature:265±5°C Duration:15±0.5sec .EIA-364-52



Reflow Profile



Preheating temperature: $150 \sim 200^\circ\text{C}$, 60~120 seconds

Liquidus temperature (T_L): 217°C , 60~150 seconds

Peak temperature: 260°C

Time within 5°C of peak temperature (T_c): 255°C , 30seconds