

6.10.4 Flexible, Foil, Heaters

RESISTORS, HEATERS, FLEXIBLE SINGLE AND DOUBLE LAYER				184P
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 4009 Detail ESCC 4009/002	IRCA RICA Division Vitorio Veneto Italy	Qualification	ESA	Apr 1992
Remarks RICA recently observed a higher quantity of defects than usual in the supplied raw material of polyimide-fep, used as insulating layer of the heater, according to external visual inspection ESCC no. 2054009 issue 4. The manufacturing yield for ESCC heaters with high area has been reduced. As consequence, RICA estimates a delay up to 6 months in the production of the heaters whose dimensions have an area equal to or greater than 15000mm² compared to the delivery date expected by the customers. NCCS 2ERIC21 is opened and under investigation.				
Qualified range: Variants 01 through 48 are qualified Single, double layer and magnetically compensated heaters				
Maximum Ohmic density		200 Ω/cm²		
Tolerances		±2, 3, 5, 10 %		
Resistance		1 to 5000 Ω		
Heating Area		1.6 to 1300 cm²		
Terminal Lead		20, 22, 24, 26, 28, 30 AWG		
Temperature coefficient		(10-6/°C): 175		
Operating Temperature Range (°C): -65 to +200				

RESISTORS, HEATERS, FLEXIBLE SINGLE AND DOUBLE LAYER				330D
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 4009 Detail ESCC 4009/004	IRCA RICA Division Vitorio Veneto Italy	Qualification	ESA	Jan 2015
Remarks				
Qualified range: All variants with heating area from 1.66 to 1300 cm2 are qualified. Single, double layer heaters Special characteristics:				
Maximum Ohmic density		330 Ω/cm2		
Rated power density		0.38		
Resistance		1 to 10000 Ω		
Heating Area		1.66 to 1300 cm2		
Terminal Lead		20 to 30 AWG		
Resistance Tolerance		(%) : ±2 to ±10		
Operating Temperature Range (°C): -65 to +150				