

10G BASE-T SINGLE PORT
TRANSFORMER MODULE

Ruggedized



- Compliant with IEEE 802.3 standards
- Operating Temperature: -40°C to +85°C
- Dielectric Withstanding Voltage (DWV): 1500 Vrms
- Terminal Finish: Sn63Pb37
- Moisture Sensitivity Level: 3

Electrical Specifications @ 25°C														
Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)						Crosstalk (dB MIN)			
	100 kHz	100 MHz	400 MHz	500 MHz	1 MHz	10 MHz	100 MHz	300 MHz	400 MHz	500 MHz	1 MHz	30 MHz	100 MHz	400 MHz
10GB-6001	3.0	1.0	1.5	1.80	22	24	18	14	10	8	65	42	35	25

NOTES:

1. Add suffix "NL" for RoHS compliant version; i.e. 10GB-6001 becomes 10GB-6001NL. NL parts have 100% SN Lead Finish.

10GB-6001

Dimensions: inch [mm]

Tolerance (unless otherwise specified): ±0.010 [0.25]

0.700 [17.78] MAX

0.490 [12.45] MAX

0.630±0.015 [16.00±0.38]

0.235 [5.97] MAX

0.010 [0.25]

0.004 [0.10]

24 SURFACES

24X 0.020 [0.50]

22X 0.050 [1.27]

24X 0.030 [0.76]

22X 0.050 [1.27]

0.550 [13.97]

0.500 [12.70]

0.650 [16.51]

24X 0°-8°

24X 0.045 [1.14]

PCB PAD PATTERN (REFERENCE ONLY)

Electrical Schematics

CHANNEL 1

(TCT1) 1

(TD1+) 2

(TD1-) 3

24 (MCT1)

23 (MX1+)

22 (MX1-)

CHANNEL 2

(TCT2) 4

(TD2+) 5

(TD2-) 6

21 (MCT2)

20 (MX2+)

19 (MX2-)

CHANNEL 3

(TCT3) 7

(TD3+) 8

(TD3-) 9

18 (MCT3)

17 (MX3+)

16 (MX3-)

CHANNEL 4

(TCT4) 10

(TD4+) 11

(TD4-) 12

15 (MCT4)

14 (MX4+)

13 (MX4-)

LEGEND

C H I P S I D E

Td ↔ Mx

Td ↔ Mx

Td ↔ Mx

Td ↔ Mx

Td ↔ Mx

M E D I A S I D E

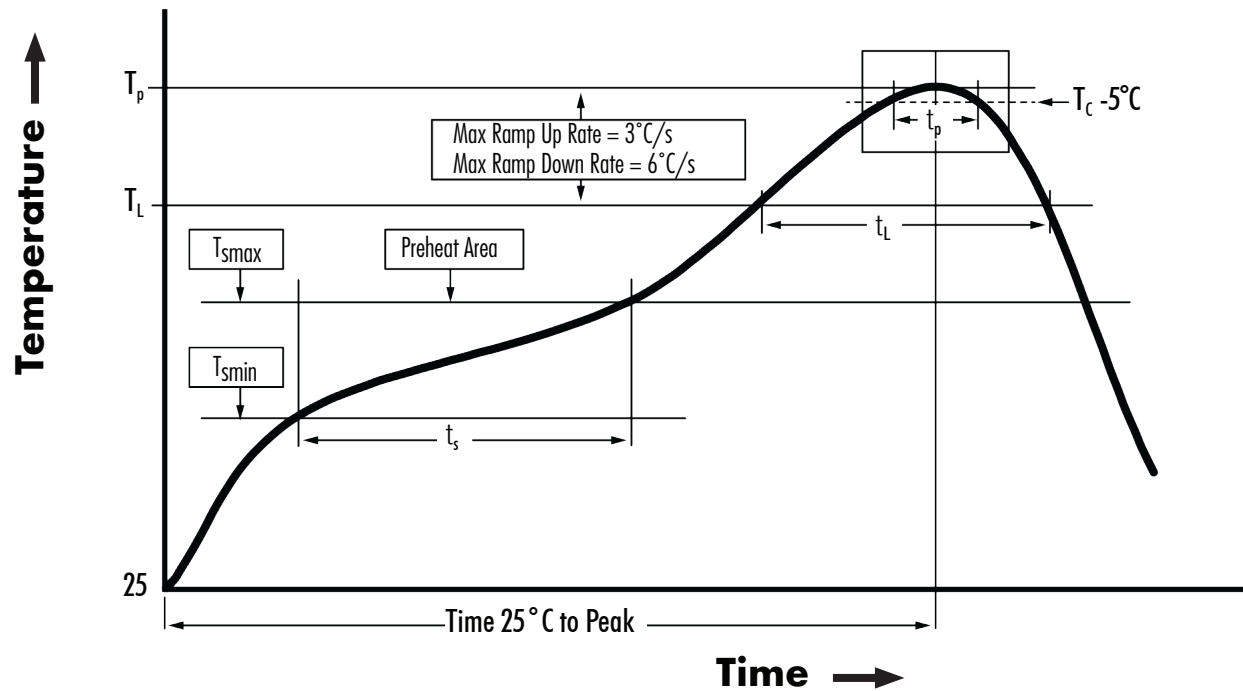
All channels are in phase between input and output



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Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_p)	Ramp-down rate (T_p to T_L)	Time 25°C to peak temperature (s MAX)
Tin/Lead Profile									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360

- NOTES:
1. All temperatures measured on the package leads.
 2. Maximum number of reflow cycles not to exceed 2.



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