MIL-STD-1553 TRANSFORMERS

Value Series (COTS) SMT Non-QPL Interface Transformers

Ruggedized

iNRCORE FAMILY OF BRANDS

These Non-QPL interface transformers are built and tested in ISO 9001 approved facilities.

- Dual ratio, dual interface
- Conform to all electrical and physical parameters of MIL-PRF-21038/27
- Operating Temperature: -55°C to +125°C
- Lead Finish: Sn63Pb37
- Moisture Sensitivity Level: 3
- Applicable Specifications:
  - MIL-STD-1553B
  - MIL-STD-202
  - MIL-PRF-21038
  - ISO 9001

Summary Performance Specifications

Droop	20% MAX
Overshoot	±1V MAX
Common Mode Rejection (CMR)	45dB MIN
Frequency Range (no load)	75kHz - 1MHz
Insulation Resistance (MIN)	10K MΩ @ 250Vdc
Dielectric Withstanding Voltage	100Vrms

Electrical Specifications @ 25°C

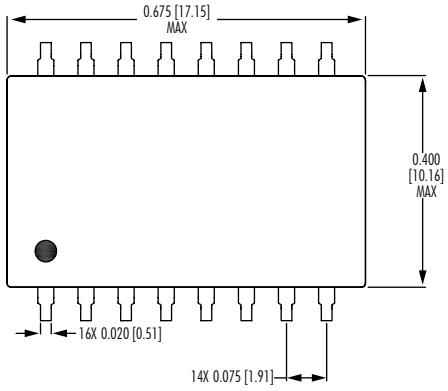
Part Number	Turns Ratio (±3%)				RDC MAX (Ω)				Impedance MIN (Ω)
	(1-3) : (16-13)	(6-8) : (12-9)	(1-3) : (15-14)	(6-8) : (11-10)	(1-3)	(6-8)	(16-13)	(12-9)	(16-13), (12-9)
DKG1553-45	1:2.50	1:2.50	1:1.79	1:1.79	1.0	1.0	3.5	3.5	4000
DKG1553-70	1:3.00	1:3.00	1:2.15	1:2.15	0.50	0.50	3.5	3.5	4000
DKG1553-71	1:3.54	1:3.54	1:2.50	1:2.50	0.50	0.50	3.5	3.5	4000
DKG1553-72	1:3.75	1:3.75	1:2.70	1:2.70	0.50	0.50	3.5	3.5	4000
DKG1553-75	1:2.65	1:2.65	1:2.07	1:2.07	0.50	0.50	3.5	3.5	4000

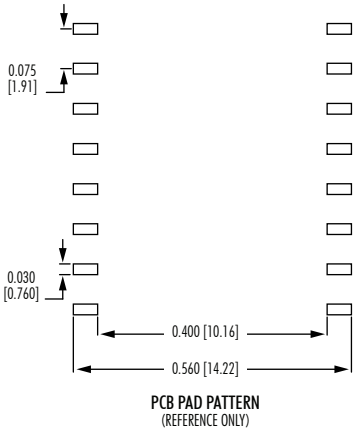
Mechanicals

Electrical Schematics

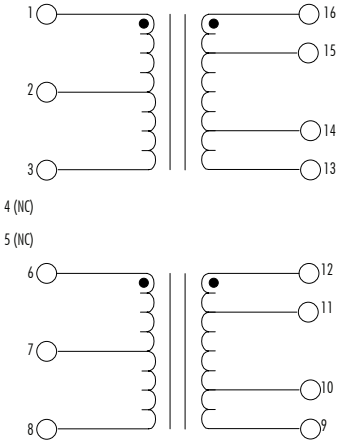
DKG1553-XX

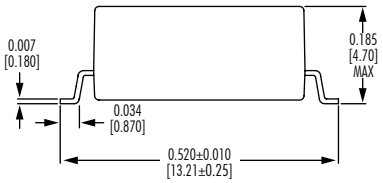
Dimensions: inch [mm]
Tolerance (unless otherwise specified): ±0.010 [0.25]

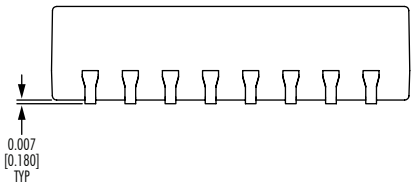




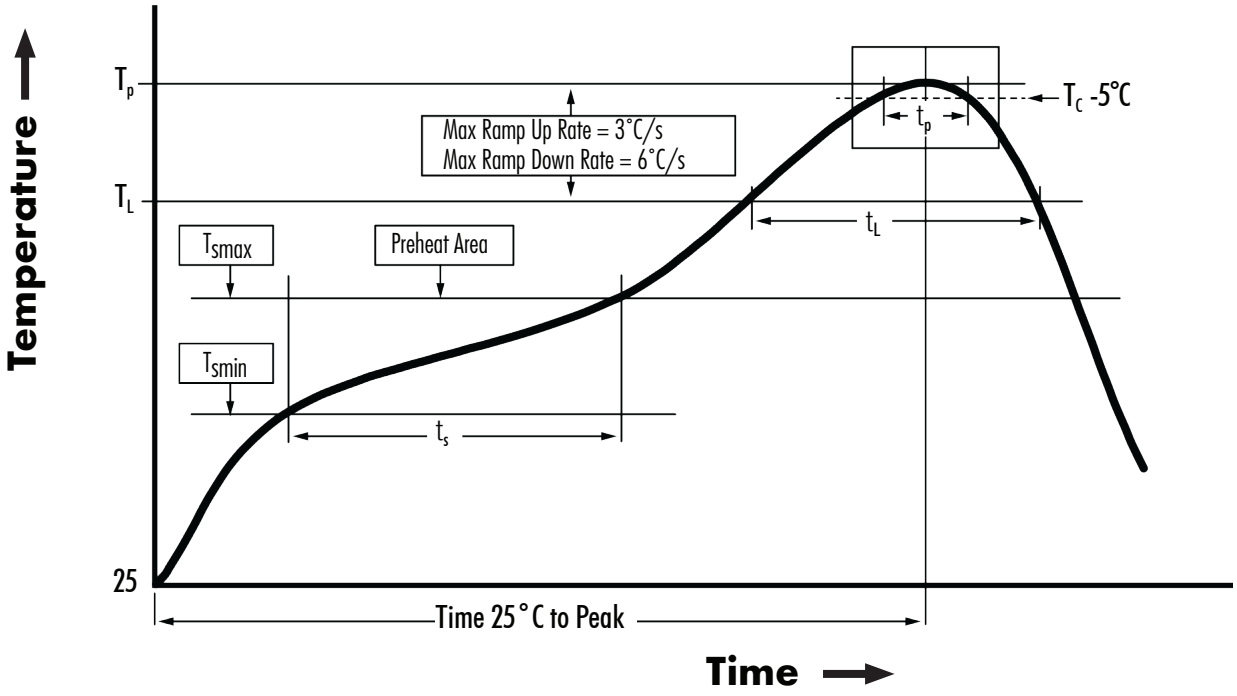
PCB PAD PATTERN
(REFERENCE ONLY)







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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