

# MIL-STD-1553 TRANSFORMERS

Value Series (COTS) THT Non-QPL Interface Transformers  
Ruggedized



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
- ⊗ Moisture Sensitivity Level: 3
- ⊗ Lead Finish: SnPb
- ⊗ Applicable Specifications:
  - ⊗ MIL-STD-1553B
  - ⊗ MIL-STD-202
  - ⊗ MIL-PRF-21038
  - ⊗ ISO 9001

## Summary Performance Specifications

Drop	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

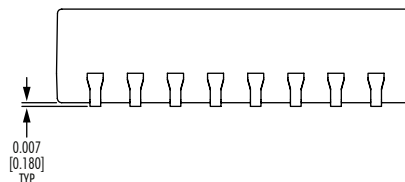
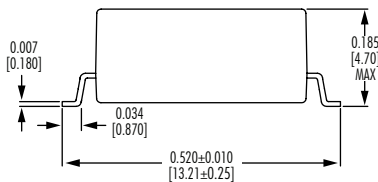
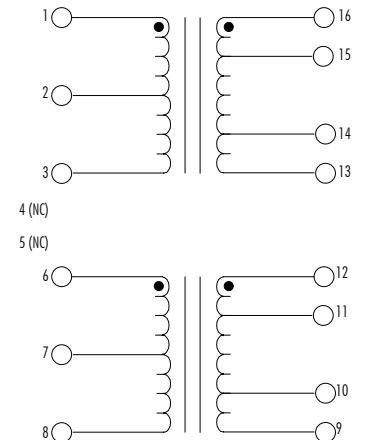
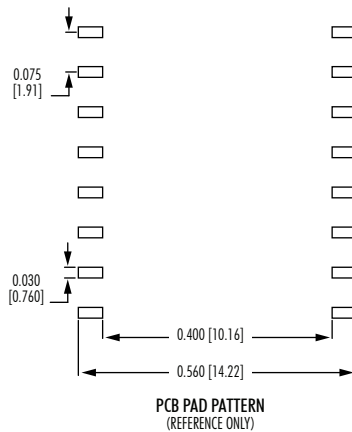
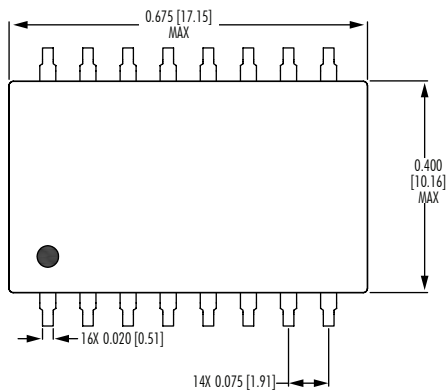
Part Number	Turns Ratio (±3%)				RDC MAX (Ω)				Impedance MIN (Ω)
	(1-3) : (16-13)	(6-8) : (12-9)	(1-3) : (15-14)	(6-8) : (11-10)	(1-3)	(6-8)	(16-13)	(12-9)	(16-13), (12-9)
DKG1553-45	1:2.50	1:2.50	1:1.79	1:1.79	1.0	1.0	3.5	3.5	4000
DKG1553-70	1:3.00	1:3.00	1:2.15	1:2.15	0.50	0.50	3.5	3.5	4000
DKG1553-71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



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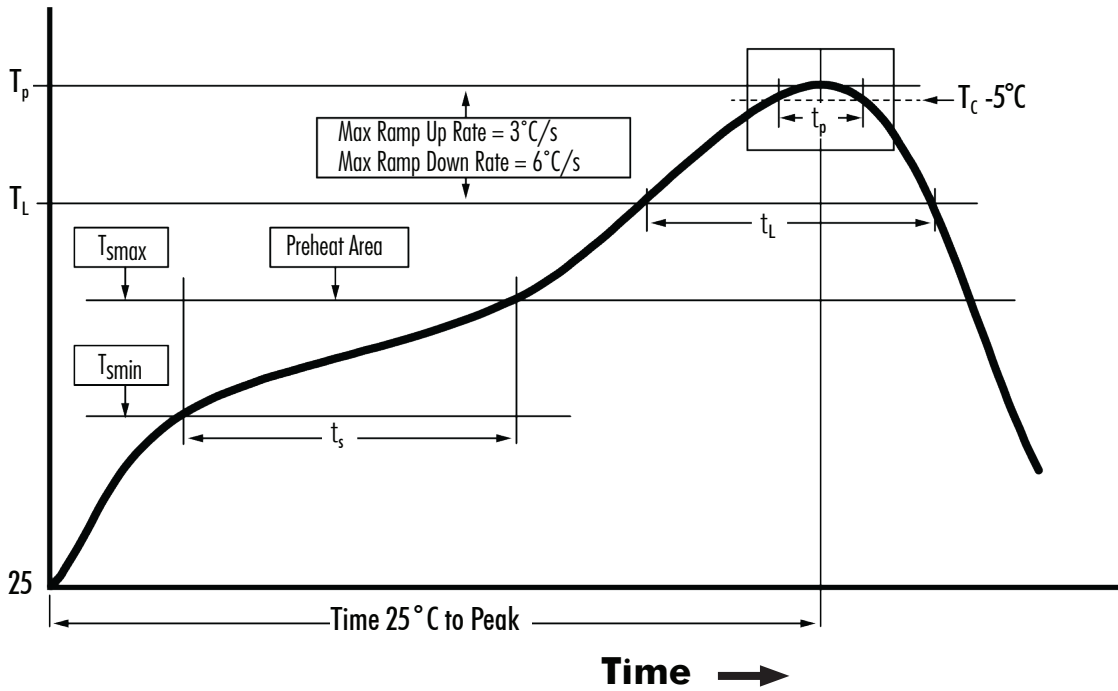
M322.E (11/21)

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## Tin/Lead 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)
100	150	183	225	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 times of reflow cycle: 2



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