Gate Drive Transformer GDT91 Series

- Excellent performances in low profile package
- Suited for Avionics and Space applications
- Frequency : 50 Khz - 200 Khz
- Applied standards : ECSS-Q-70-02 / ESCC-3201 screening flow applied / MIL-STD-202
- Materials meet UL94V-0 rating
- Weight : 2 grams

Electrical Data (25°C)

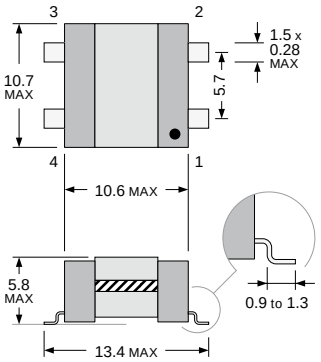
ID Code	ET (Vµs)	Primary Inductance Max	Turn ratio ± 0,5%	DC Resistances	Isolation Voltage	Leakage Inductance	Interwinding Capacitance	Connection Type
GDT91 M50 20 1WR	20	L_{1-2} > 500µH (10kHz - $1V_{RMS}$)	N_{1-2} / N_{4-3} = 1	R_{1-2} ≤ 1.25Ω R_{3-4} ≤ 1.25Ω	500 VDC - 1 min (Ri ≥ 100MΩ)	Lf_{1-2} < 1µH ($_{3-4}$ in short circuit)	$C_{1-2/3-4}$ < 100 pF	A
GDT91 M50 50 1WR	50	L_{1-4} > 500µH (10kHz - $1V_{RMS}$)	N_{1-4} / N_{2-3} = 1	R_{1-4} ≤ 3.1Ω R_{2-3} ≤ 3.1Ω	250 VDC - 1 min (Ri ≥ 100MΩ)	Lf_{1-4} < 1µH ($_{2-3}$ in short circuit)	$C_{1-4/2-3}$ < 150 pF	B

ID Code	V peak Max	I peak Max	I average Max
GDT91 M50 20 1WR	7,5V	1A (100ns)	50 mA
GDT91 M50 50 1WR	2,4V	1A (100ns)	15 mA

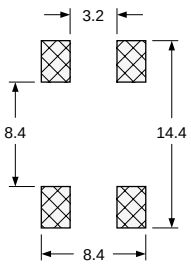
Notes

- Insulation class (windings) : Classe H2
- Operating temperature : -55 °C to +125 °C
- Storage temperature : -55 °C to +140 °C

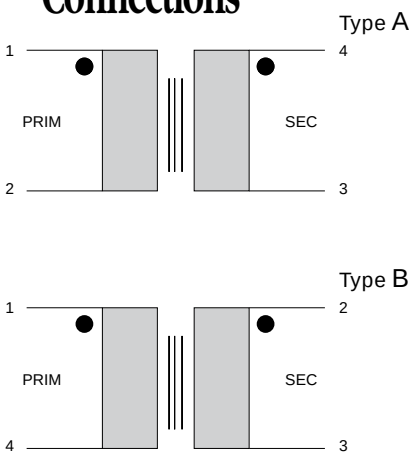
Dimensions
(mm, top view)



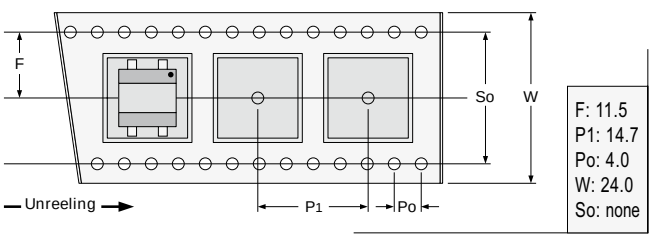
PCB Layout
(suggested)



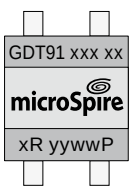
Connections



Packaging
Tape and Reel:
700 pieces per reel of diameter 330 mm



Marking



yyww :
Date code

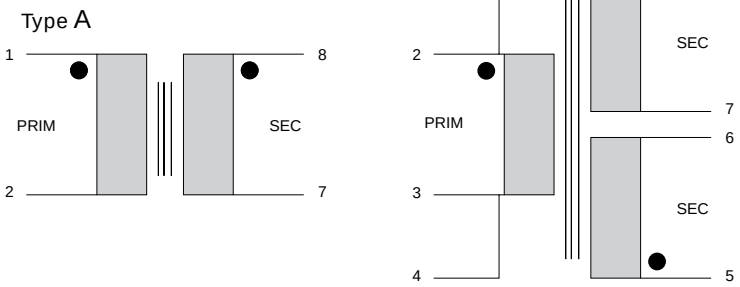
Gate Drive Transformer GDT15 Series

- Excellent performances in low profile package
- Suited for Avionics and Space applications
- Frequency range : 50 Khz - 500 Khz
- Applied standards : ECSS-Q-70-71 / ESCC-3201 screening flow applied / ABD-0100 / DO-160
- Materials meet UL94-V0 rating
- Approx. weight : 5 grams

Electrical Data (25°C)

ID Code	ET (Vµs)	Primary Inductance Max	Turn ratio ± 1%	DC Resistances ± 15% (mΩ)	Leakage Inductance	Interwinding Capacitance	Connection Type
GDT15 M50 60 1WR	60	L_{1-4} > 500µH (10kHz - $1V_{RMS}$)	N_{7-6} / N_{1-4} = 1.52	R_{1-4} = 170 R_{6-7} = 400	Lf_{1-4} < 2.0µH ($_{6-7}$ in short circuit)	$C_{1-4/6-7}$ < 150 pF	A
GDT15 M85 80 2WR	80	L_{1-4} > 850µH (10kHz - $1V_{RMS}$)	1/1/1	R_{1-3} = 400 R_{8-7} = 400 R_{6-5} = 400	$Lf_{1-2/3-4}$ < 25µH	$C_{1-4/6-7}$ < 150 pF	B

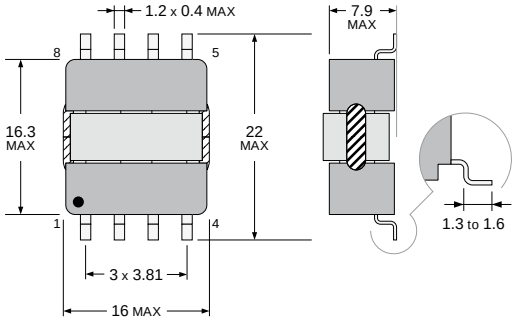
Connections



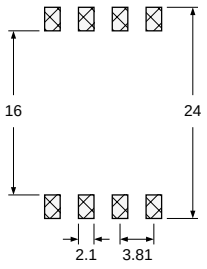
Notes

- Insulation class (windings) : Classe H
- Operating temperature : -55 °C to +125 °C
- Storage temperature : -55 °C to +140 °C
- Dielectric Strength : 500 V_{RMS} - 50 Hz
- Isolation Voltage : 500 VDC - 50 min (Ri ≥ 100MΩ)

Dimensions (mm, top view)

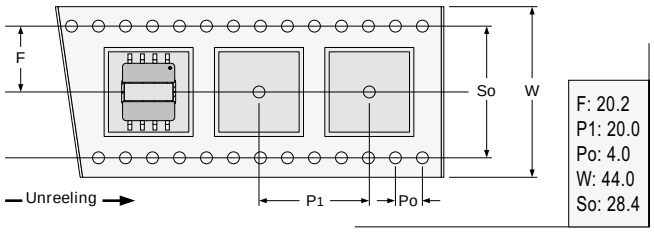


PCB Layout (suggested)



Packaging

Tape and Reel:
400 units per reel of diameter 330 mm



Marking

yyww :
Date code