

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)

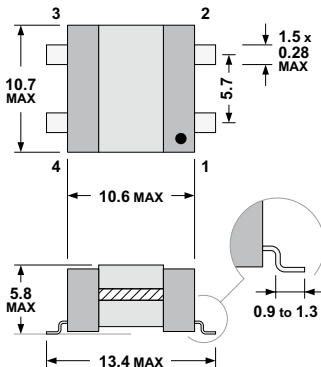
ID Code	ET (Vµs)	Primary Inductance Max	Turn ratio ±0,5%	DC Resistances	Isolation Voltage	Leakage Inductance	Interwinding Capacitance	Connection Type
GDT91 M50 20 1WR	20	$L_{1-2} > 500\mu\text{H}$ (10kHz - $1V_{\text{RMS}}$)	$N_{1-2} / N_{4-3} = 1$	$R_{1-2} \leq 1.25\Omega$ $R_{3-4} \leq 1.25\Omega$	500 VDC - 1 min ($R_i \geq 100M\Omega$)	$L_{f1-2} < 1\mu\text{H}$ ($_{3,4}$ in short circuit)	$C_{1-2/3-4} < 100\text{ pF}$	A
GDT91 M50 50 1WR	50	$L_{1-4} > 500\mu\text{H}$ (10kHz - $1V_{\text{RMS}}$)	$N_{1-4} / N_{2-3} = 1$	$R_{1-4} \leq 3.1\Omega$ $R_{2-3} \leq 3.1\Omega$	250 VDC - 1 min ($R_i \geq 100M\Omega$)	$L_{f1-4} < 1\mu\text{H}$ ($_{2-3}$ in short circuit)	$C_{1-4/2-3} < 150\text{ pF}$	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

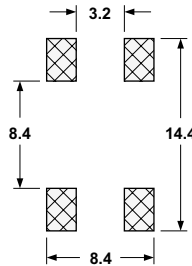
Notes

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

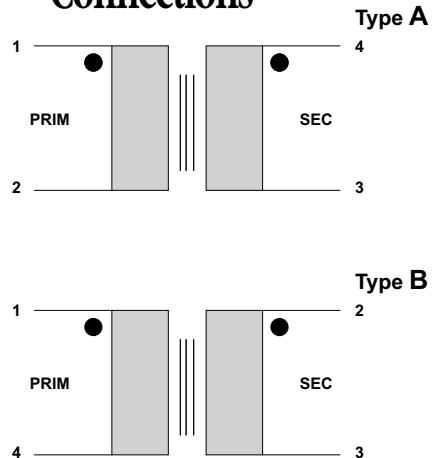
Dimensions (mm, top view)



PCB Layout (suggested)

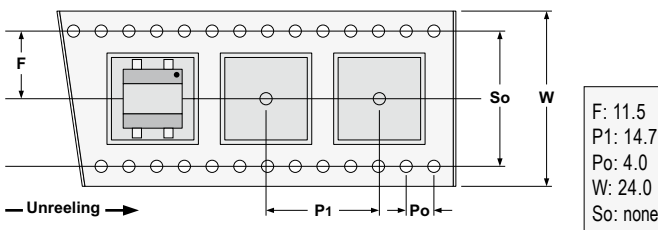


Connections

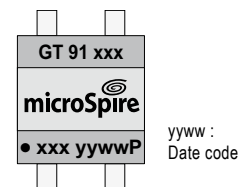


Packaging

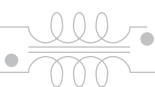
Tape and Reel:
700 pieces per reel of diameter 330 mm



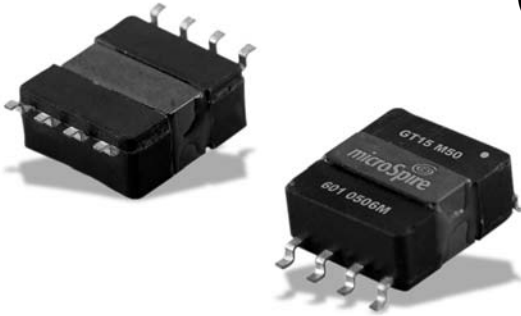
Marking



High Grade Technologies... Power Magnetics... Gate Drive Transformers...



Gate Drive Transformer GDT15 Series

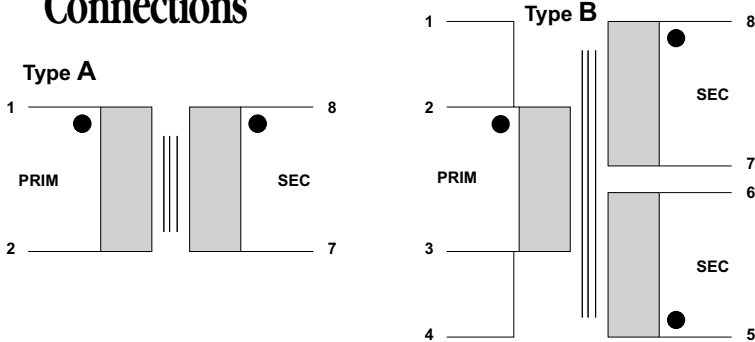


- Excellent performances in low profile package
- Suited for Avionics and Space applications
- Frequency range : 50 Khz - 500 Khz
- Applied standards : ECSS-Q-70-71 / ESCC-3201 screening flow applied / ABD-0100 / DO-160
- Materials meet UL94-V0 rating
- Approx. weight : 5grams

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	L _{f1-4} < 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 ₆₋₇ = 400 R ₈₋₅ = 400	L _{f1-2/3-4} < 25µH	C _{1-4/6-7} < 150 pF	B

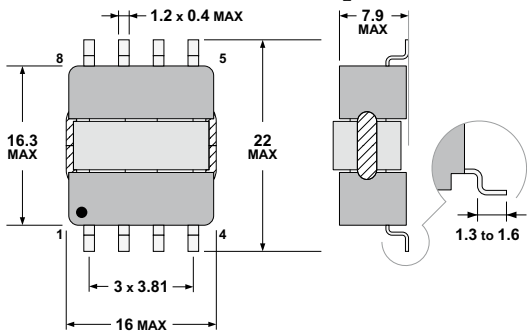
Connections



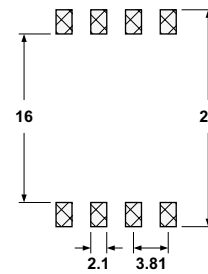
Notes

- 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)

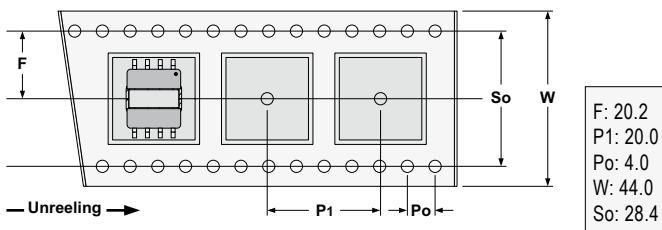


PCB Layout (suggested)

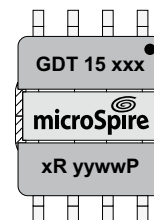


Packaging

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



Marking



yyww :
Date code

