

Electrical / Environmental

HM42

Gate Drive Transformers

Operating Temperature Range

-40°C to +125°C

- Ambient Temperature, Maximum
- +85°C
- 1500Vdc Isolation between Gate and Drive
- Basic Insulation 1500Vrms between Primary and Secondary







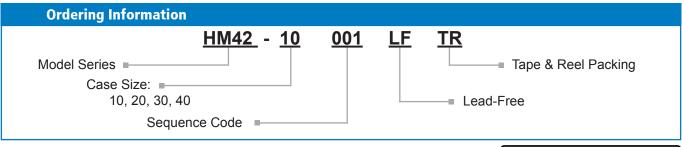
Electrical Schematics			
Figure 1	Figure 2	Figure 3	Figure 4
1 N2 N2 5 3 8 N3 N3 4	1 N2 N2 6 4 N3 5	$ \begin{array}{c c} 1 & & & & & & & & & & & & & $	1 4 N1 8 N2 5

Specifica	tions @	25°C							
Part Number	Tur ns	Primary Inductance (μΗ Min)	Leakage Inductan (µH Max)	V*μsec (Max)	Primary DCR (Ω Max)	Secondary DCR (Ω Max)	Pri-Sec Insulation	Electrical Schematic	Case Size
HM42-10001LF	1:1:1	300	0.50	80.9	2.00	2.00	1500Vdc	Figure 1	10
HM42-10002LF	2:1:1	300	0.50	40.4	2.00	1.00	1500Vdc	Figure 1	10
HM42-20001LF	1:1	695	0.50	29.3	1.00	1.00	1500Vdc	Figure 3	20
HM42-20002LF	1:1	785	0.46	31.5	0.60	0.60	1500Vdc	Figure 3	20
HM42-30001LF	1:1:1	980	0.75	30.2	0.50	0.50	1500Vac	Figure 1	30
HM42-30002LF	1:1	980	0.75	30.2	0.50	0.50	1500Vac	Figure 3	30
HM42-30003LF	1:1:1	1500	0.50	37.8	0.62	0.62	1500Vac	Figure 1	30
HM42-40001LF	1:1:1	3300	0.70	68.0	1.60	1.60	1500Vdc	Figure 2	40
HM42-40002LF	1:1	1400	0.50	49.1	0.60	0.60	1500Vac	Figure 4	40
HM42-40003LF	1:1	1200	0.50	45.4	0.50	0.50	1500Vac	Figure 2	40
HM42-40004LF	2:1:1	1200	0.60	45.4	0.60	0.30	1500Vac	Figure 2	40

Notes:

- (1) Inductance is measured at 100kHz, 0.1Vrms.
- (2) It is recommended that the temperature of the component (ambient plus temperature rise) does not exceed 125°C under worst case operating conditions.

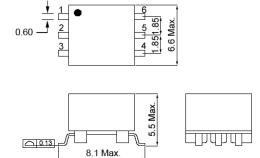
Packaging					
Standard: E	mbosse	d Tape & Ree	el .		
_	Reel:	Diameter:		=	13" (330.2mm)
		Capacity:	Case size 10	=	750 Units
			Case size 20	=	1,500 Units
			Case size 30	=	1,000 Units
			Case size 40	=	450 Units



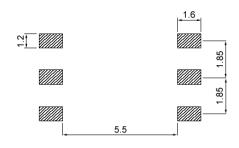


Outline Dimensions (Inch/mm)

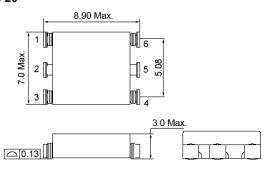
Case 10



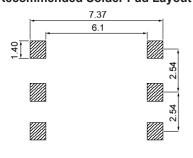
Recommended Solder Pad Layout



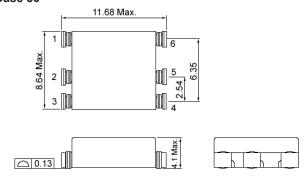
Case 20



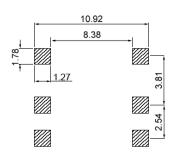
Recommended Solder Pad Layout



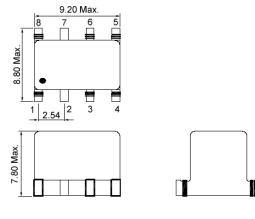
Case 30



Recommended Solder Pad Layout



Case 40



Recommended Solder Pad Layout

