

Electrical / Environmental

- 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



HM42

Gate Drive Transformers



Electrical Schematics

Figure 1

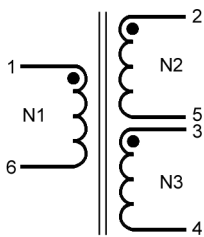


Figure 2

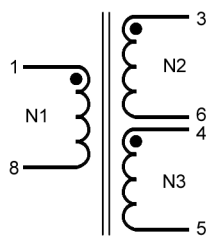


Figure 3

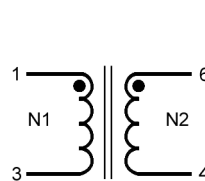
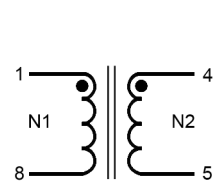


Figure 4



Specifications @ 25°C

Part Number	Tur ns	Primary Inductance (µH Min)	Leakage Inductance (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.

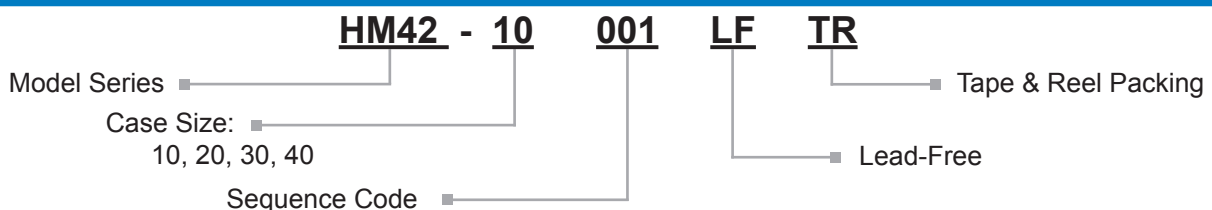
(2) It is recommended that the temperature of the component (ambient plus temperature rise) does not exceed 125°C under worst case operating conditions.

Packaging

Standard: Embossed Tape & Reel

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

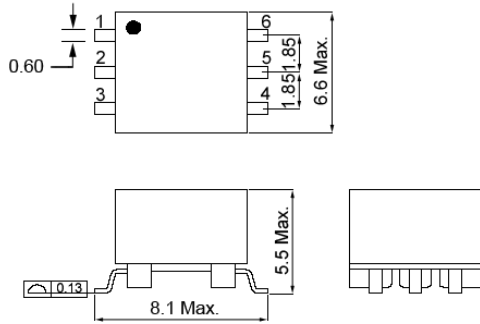
Ordering Information



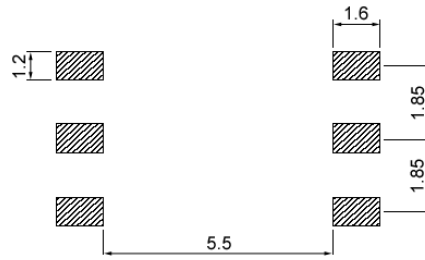
Last Updated: 9 April 2015

Outline Dimensions (Inch/mm)

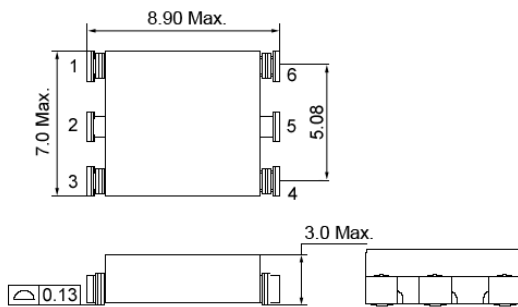
Case 10



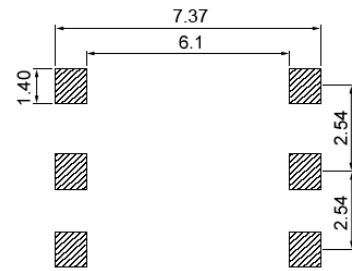
Recommended Solder Pad Layout



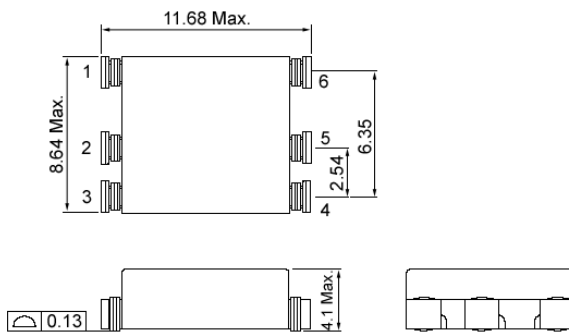
Case 20



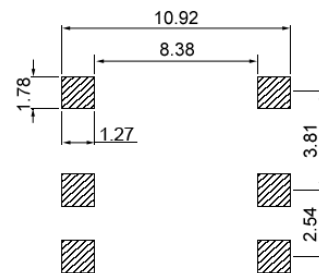
Recommended Solder Pad Layout



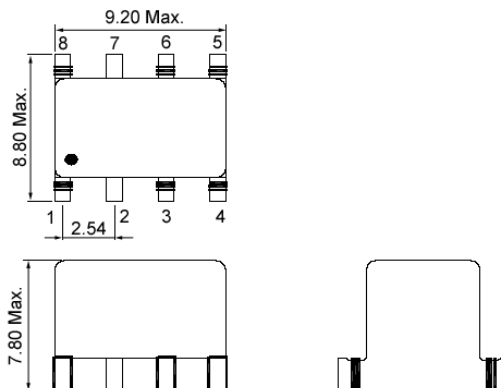
Case 30



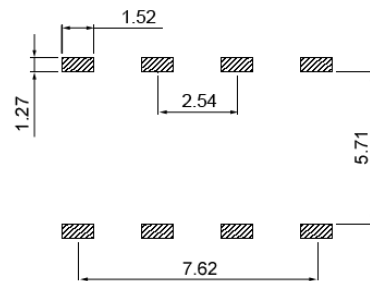
Recommended Solder Pad Layout



Case 40



Recommended Solder Pad Layout



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