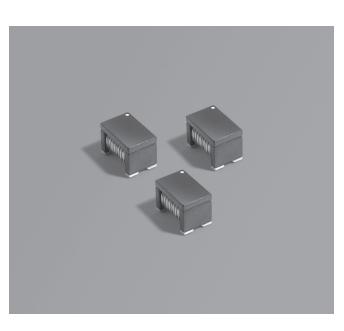
LLC Half-Bridge Transformers For Isolated Gate Driver Bias Supply





- Low interwinding capacitance to minimize EMI and achieve high CMTI (Common Mode Transient Immunity)
- Optimized for isolated bias supplies for SiC and GaN gate drivers, such as Texas Instrument UCC25800-Q1
- Ideal for automotive OBC and traction Inverters in EV/HEV
- Highly automated for cost-effective and exceptional quality and reliability
- AEC-Q200 gualified and Isolation (VDC) 40007

Core material Ferrite

Terminations RoHS compliant tin over nickel over silver glass frit. Weight 0.53 - 0.54 g

Max part temperature +125°C

Ambient temperature -40°C to +125°C

Storage temperature Component: -40°C to +125°C.

Tape and reel packaging: -40°C to +80°C Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity) Packaging 350/7" reel; 1500/13" reel Plastic tape: 16 mm wide, 0.4 mm thick, 8 mm pocket spacing, 5.5 mm pocket depth PCB washing Tested with pure water or alcohol only. For other solvents,

see Doc787_PCB_Washing.pdf

Part	Turns ratio	Inductance ² ±30% (µH)		DCR max ³ (Ohms)		Leakage L ⁴ ±20% (µH)		lrms⁵	Volt-time product	Cap ⁶ max
number1	Pri : Sec	Pri	Sec	Pri	Sec	Pri	Sec	(mA)	(V-µsec)	(pF)
HTX7045C-753ARC	1:1	75	75	0.35	0.35	8.5	8.5	730	33.9	0.75
HTX7045C-104ARC	1:1	100	100	0.40	0.40	9.5	9.5	680	38.8	0.90
HTX7045C-124DRC	1.5 : 1	120	54	0.42	0.28	12.5	5.5	660	38.8	0.70
HTX7045C-124ERC	1.33 : 1	120	68	0.42	0.32	12	6.5	660	45.3	0.70
HTX7045C-124FRC	1.2 : 1	120	84	0.42	0.35	11	7.5	660	38.8	0.75
HTX7045C-134BRC	2.5 : 1	130	21	0.44	0.17	15	2.5	660	45.3	0.70
HTX7045C-144CRC	2.0 : 1	140	35	0.45	0.23	15	3.5	640	45.3	0.75

1. When ordering, please specify turns ratio and packaging codes:

HTX7045C-144CRC

Turns ratio: A = 1:1 B = 2.5:1 C = 2:1 D = 1.5:1

E = 1.33:1 **F** = 1.2:1

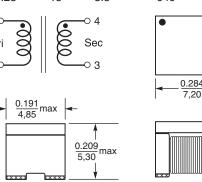
Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (350 parts per full reel). Quantities less than full

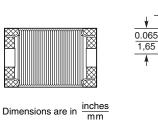
- reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
 - D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1500 parts per full reel)
- 2. Inductance measured at 100 kHz, 0.1 Vrms, 0 ADC on an Agilent 4263B (or equivalent).
- 3. DCR is measured on a Keithley 580 Micro-ohmmeter (or equivalent).
- 4. Leakage Inductance LL is measured at 100 KHz, 0.1 Vrms on an Agilent 4263B (or equivalent). Sec is shorted for PRI LL / PRI is shorted for SEC LL.
- 5. Current that causes a 40°C rise from 25°C when applied to the primary winding with secondary current defined by the turns ratio.
- 6. Interwinding capacitance is measured from primary to secondary at 250 KHz, 0.1 Vrms.
- 2800 Vrms, 4000 VDC; one minute isolation (hipot) measured between primary and secondary. 4.9 mm creepage and clearance Material Group 1 (CTI>600).
- 8. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

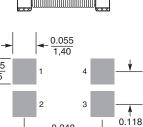


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6,30 Recommended Land Pattern

0.248

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0.284 max

