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Basic Concept of Inverter Transformers



By: Sandy Lai

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Inverter Transformers

- Basic Topological Diagram
- Core Shape & Output Power
- Electrical Specifications
- Mechanical Specifications
- Workmanship

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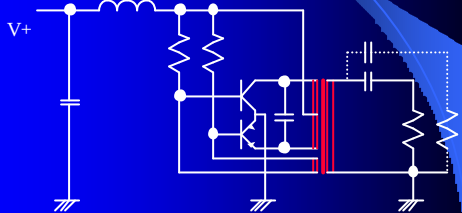
Basic Topological Diagram

- Royer Application
- Direct Driver Application

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Basic Topological Diagram

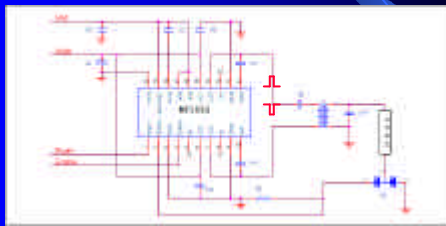
Royer Application



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Basic Topological Diagram

Direct Driver Application



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Core Shape & Output Power

- Core Shape & End Products
- Core Size & Output Power

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Core Shape & Output Power

- Core Shape & End Products
 - CI : Notebook, LCD Monitor
 - LL : Notebook, LCD Monitor
 - UI : Notebook, LCD Monitor
 - UU : Notebook, LCD Monitor
 - EFD7.6 ~ EFD9.5 : PDA, Digital Camera
 - EFD13 † : LCD Monitor
 - EPC : LCD Monitor
 - ER9.5 ~ ER14.5 : PDA, Digital Camera

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Core Shape & Output Power

- Core Size & Output Power
 - CI8 : 3.5Watt
 - CI10, UI9.8, UI9 : 4Watt
 - UI11.7, UI14.8 : 4 ~ 5Watt
 - EFD13.8 : 4 ~ 5Watt
 - EPC19 : 12 ~ 15Watt
 - CI25 : 15 ~ 20Watt
 - EEL19 : 15 ~ 20Watt
 - EFD20 : 20Watt
 - EFD25 : 25 ~ 30Watt

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Electrical Specifications

- DCR
- Inductance
- Leakage Inductance
- Turns Ratio
- Open Lamp Voltage
- Running Voltage
- Hi-Pot

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Mechanical Specifications

- ✧ All Outside Dimensions
- ✧ Pin Assignment
- ✧ Pin Coplanarity
- ✧ Pin Pulling Force Strength
- ✧ Bending Test
- ✧ Recommend PCB Layout Pad

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Workmanship

- ✧ Winding Tension
- ✧ Fine Wire Twisting
- ✧ Gluing
- ✧ Soldering

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Q&A



Thank You

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