International Rectifier

THE POWER MANAGEMENT LEADER

ENERGY SAVINGS



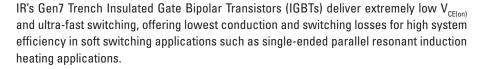
1400V Trench-Gate Field Stop IGBTs

Features:

- 1400V Trench IGBTs optimized for Induction Heating and soft switching applications
- Trench-gate, field stop technology on thin wafer offers lowest conduction and switching losses
- Thin wafer reduces thermal resistance, allowing higher power dissipation
- Available up to 1400V for higher power systems
- $T_{J(max)} = 175^{\circ}C$
- 30V V_{GE} rating and robust FBSOA
- Ultra-low V_F Diode
- Gate drive IC's further simplify design



IRG7PK35UD1PBF, IRG7PK35UD1-EPBF for Induction Heating and Soft Switching Applications

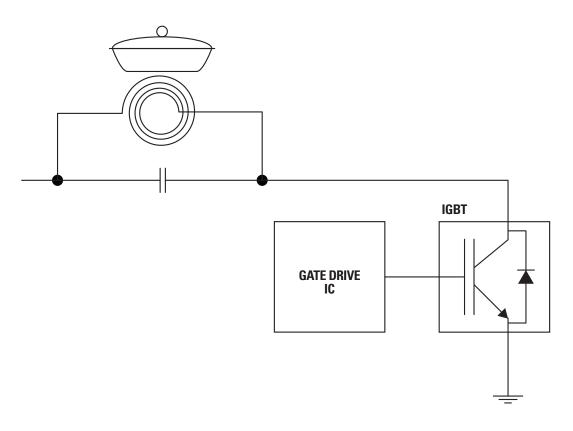




The rugged, reliable ultra-fast IGBTs are available with a blocking voltage up to 1400V enabling higher power single-ended parallel resonant power converters and offer additional guard band for more robust designs. The devices are co-packaged with ultra-low forward voltage diodes to minimize losses improving efficiency and overall system reliability.

IR's rugged portfolio of gate driver IC's further simplify design. Providing high drive capability and a full complement of protection features they enable more efficient and reliable system design.

Gen 7 1400V Trench-Gate Field Stop IGBTs



IGBTs

| Part | Package | V _{CES} (V) | IC @100C (A) | V _{CE(on)} @25C typ (V) |
|-------------|---------|----------------------|--------------|----------------------------------|
| IRG7PK35UD1 | TO-247 | 1400 | 20 | 2.0 |
| IRG7PH28UD1 | TO-247 | 1200 | 15 | 1.95 |
| IRG7PH42UD1 | TO-247 | 1200 | 45 | 1.7 |
| IRG7PH35UD1 | TO-247 | 1200 | 25 | 1.9 |

Gate Drive ICs

| Part | Topology | Voffset | lo+ (mA) | Io- (mA) | Package |
|----------|---------------|---------|----------|----------|--------------|
| IRS44262 | Dual Low Side | 25 | 2300 | 3300 | 8-Lead SOIC |
| IRS44273 | Low Side | 25 | 1500 | 1500 | 5-Lead SOT23 |
| IRS4427 | Dual Low Side | 25 | 2300 | 3300 | 8-Lead SOIC |
| IR25600 | Dual Low Side | 25 | 2300 | 3300 | 8 Lead |
| IR2121 | Low Side | 5 | 1600 | 3200 | 8 Lead |
| IRS4426 | Dual Low Side | 25 | 2300 | 3300 | 8-Lead SOIC |