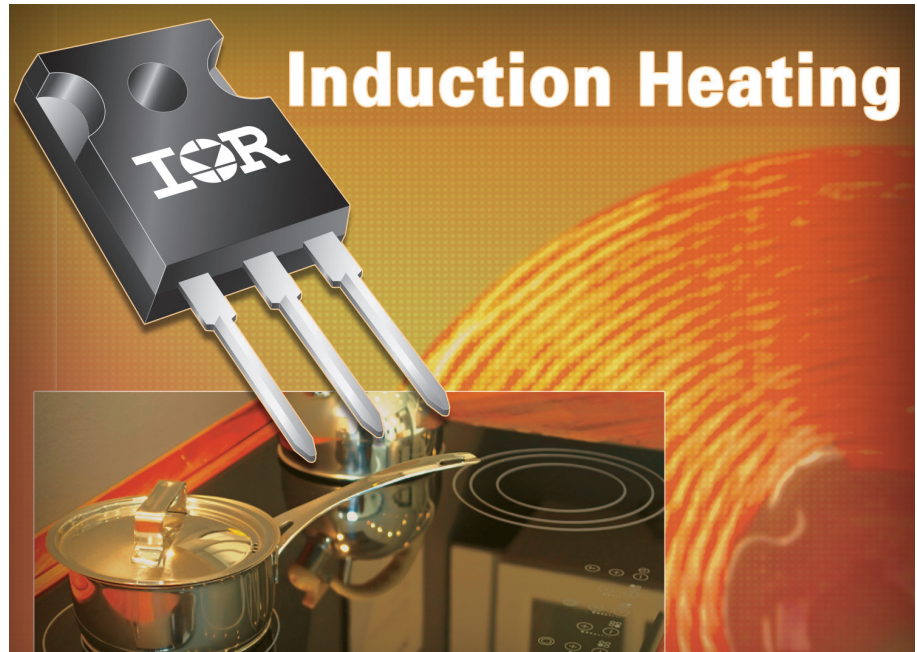


1400V Trench-Gate Field Stop IGBTs

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

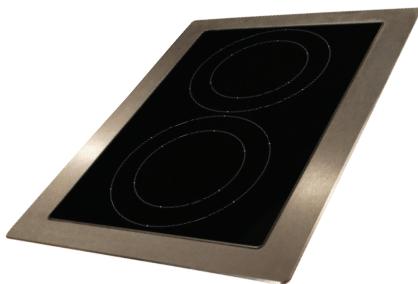


IRG7PK35UD1PBF, IRG7PK35UD1-EPBF for Induction Heating and Soft Switching Applications

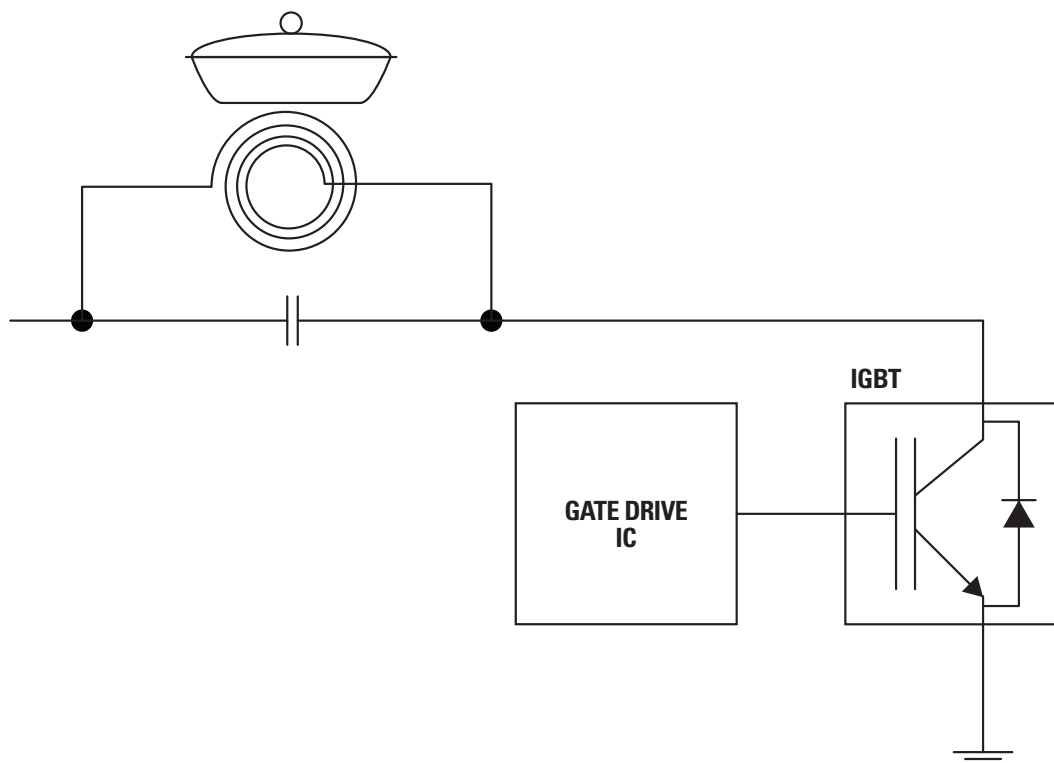
IR's Gen7 Trench Insulated Gate Bipolar Transistors (IGBTs) deliver extremely low $V_{CE(on)}$ and ultra-fast switching, offering lowest conduction and switching losses for high system efficiency in soft switching applications such as single-ended parallel resonant induction heating applications.

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	Io+ (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