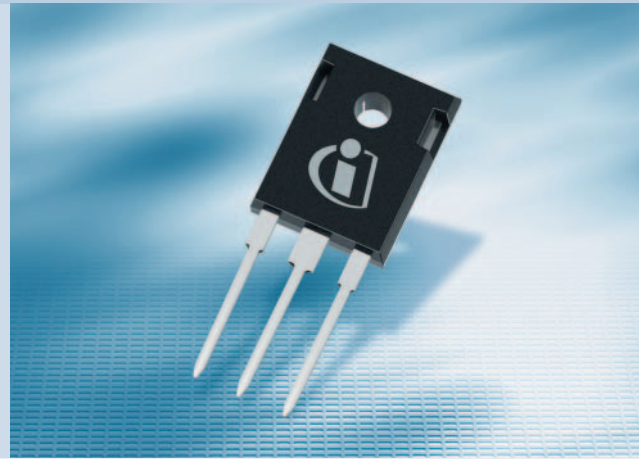


Application Specific TrenchStop™ IGBT Technology for Induction Cooking



Latest 600 V/900 V/1000 V and 1200 V IGBT Technology

THE TrenchStop™ IGBT in combination with a tailor-made EmCon™ diode offer lowest losses and highest energy efficiency for 600 V/900 V and 1000 V induction cooking applications.

COMPACT DESIGN and high reliability are achieved by using latest reverse conducting TrenchStop™ technology which increases efficiency in 1200 V applications significantly.

Applications

- Induction cooking
- Rice cookers
- Microwave ovens
- Other soft switching applications

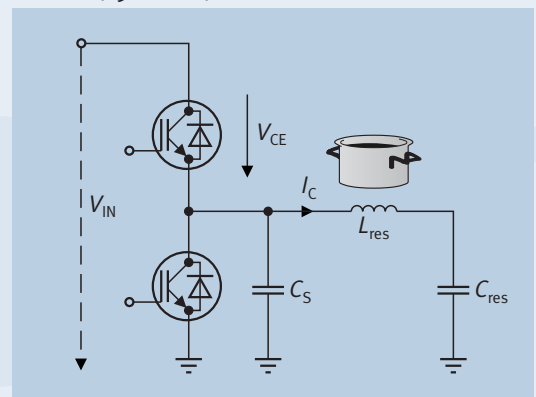
Features

- Reverse conducting technology in 1200 V
- Best in class conduction properties in V_{CEsat} and V_f
- Higher system efficiency
- Easier design
- Soft current turn-off waveforms

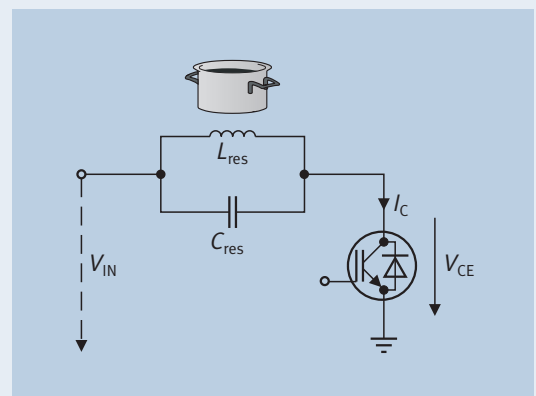
Benefits

- Smaller Package, less system costs, less volume
- Lowest power dissipation, best thermal management
- No / less heatsink or fan
- Faster time to market
- Low EMI, less filter costs

Half-Bridge Topology 600 V/900 V/1000 V



Single Ended Topology 1200 V



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Power Management & Supply



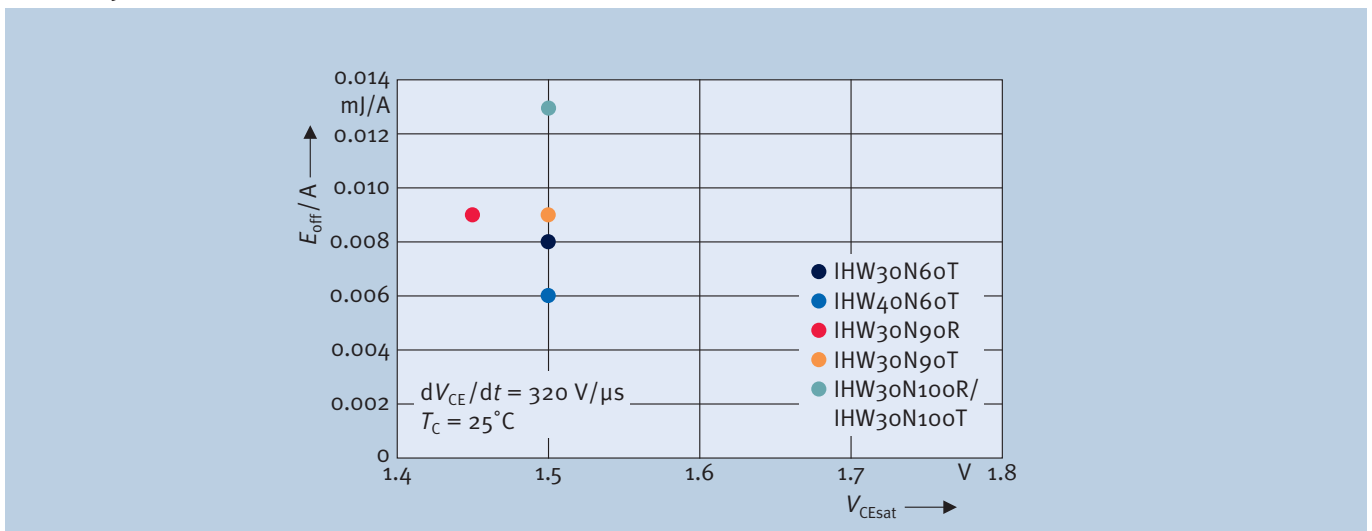
Never stop thinking

Induction Heating IGBT Portfolio

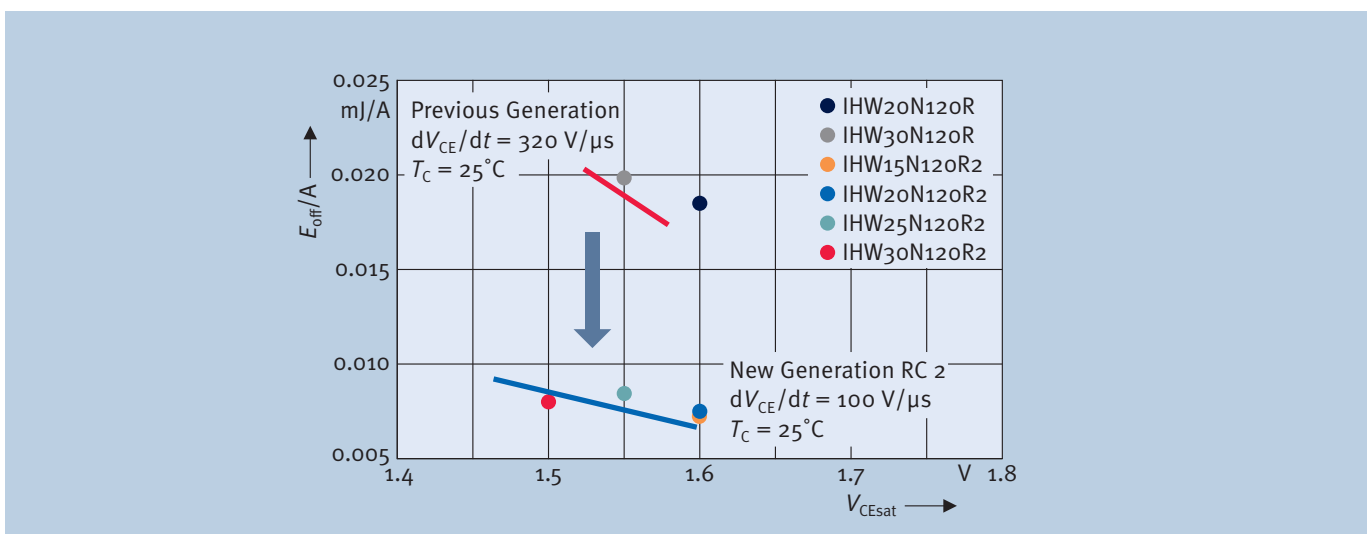
V_{CES} [V]	Type	I_C/I_F @ 100°C [A]	V_{CESat} @ 25°C [V]	V_{CESat} @ 150°C [V]	E_{off} @ 25°C, 320 V/μs [mJ]	$V_{f typ}$ @ 150°C [V]
600	IHW30N60T	30/13	1.5	1.8	0.24	1.1
600	IHW40N60T	40/20	1.5	1.8	0.24	1.1
900	IHW30N90R	30/30	1.45	1.7	0.27	1.6
900	IHW30N90T	30/13	1.5	1.7	0.27	1.1
1000	IHW30N100R	30/30	1.5	1.7	0.39	1.7
1000	IHW30N100T	30/13	1.5	1.7	0.39	1.1
1200	IHW40T120	40/20	1.8	2.3	0.66	1.7

V_{CES} [V]	Type	I_C/I_F @ 100°C [A]	V_{CESat} @ 25°C [V]	V_{CESat} @ 150°C [V]	E_{off} @ 25°C, 100 V/μs [mJ]	$V_{f typ}$ @ 150°C [V]
1200	IHW15N120R2	15/15	1.5	1.75	0.11	1.60
1200	IHW20N120R2	20/20	1.55	1.8	0.15	1.60
1200	IHW25N120R2	25/25	1.6	1.85	0.21	1.70
1200	IHW30N120R2	30/30	1.6	1.9	0.24	1.70

600 V/900 V/1000 V



1200 V



Infinite TrenchStop™ IGBT offer the most advanced gate trench and fieldstop technology. Lowest power dissipation enables efficient thermal management which leads to excellent price/performance ratio.