



## 600/650 V and 1200 V, 50 A to 250 A IGBT Modules

### 600/650 V and 1200 V, up to 250 A IGBT Modules in SOT-227 Package

High efficiency IGBT Modules featuring SOT-227 standard outline. A choice of PT, NPT and Trench IGBT technologies allows usage in switching frequencies from 1 kHz to 150 kHz. Configured as single switches (with or without anti-parallel diode) and choppers, these modules are the ideal choice for high frequency power applications. New generation modules offer higher thermal efficiency versus previous generations.

#### FEATURES

- Wide range of current ratings: 50 A to 250 A
- Voltage up to 1200 V
- High isolation voltage
- New generation under development features lower thermal resistance and higher current rating
- Electrically isolated baseplate
- Optimized anti-parallel ultrafast diode with soft recovery characteristics
- Short circuit capability available on many configurations
- Contact Vishay for customization of circuit topology, IGBT speed
- Gradually introducing modules using proprietary Vishay 600 V and 650 V IGBT silicon (Trench PT and Trench Field-Stop technologies)

#### APPLICATIONS

- Industrial high frequency welding
- TIG welding
- UPS
- Solar inverters
- Switch Mode Power Supplies (SMPS)
- Power Factor Correction (PFC)
- Induction heating

#### BENEFITS

- Easy to use and parallel
- Low profile package
- Low thermal resistance allows operation at higher case temperatures while maintaining the operating junction temperature within safe limits
- Very low internal inductance
- Due to its flexibility, this package allows several user-level configurations and is suitable for many different applications
- The complete and broad product portfolio of SOT-227 allows the design of a full electronic inverter for industrial applications

Part Number	Circuit	$V_{CES}$ (V)	$I_c$ at $T_c$ (A) (°C)		Note
			(A)	(°C)	
VS-GB90DA120U	Single Switch with Diode	1200	90	90	New Generation
VS-GB90SA120U	Single Switch No Diode	1200	90	90	New Generation
VS-GB90DA60U	Single Switch with Diode	600	90	90	New Generation
VS-GT120DA65U	Single Switch with Diode	650	120	90	New - 650 V
VS-GT140DA60U	Single Switch with Diode	600	140	90	New Generation
VS-GT175DA120U	Single Switch with Diode	1200	175	90	New Generation
VS-GA200SA60UP	Single Switch No Diode	600	100	100	New Generation
VS-GP250SA60S	Single Switch No Diode	600	239	90	New - Proprietary Vishay IGBT Silicon
VS-GB55LA120UX	Chopper Low Side	1200	57	80	New
VS-GB55NA120UX	Chopper High Side	1200	57	80	New
VS-GB75LA60UF	Chopper Low Side	600	76	80	New
VS-GB75NA60UF	Chopper High Side	600	76	80	New
VS-GT105LA120UX	Chopper Low Side	1200	92	80	New
VS-GT105NA120UX	Chopper High Side	1200	92	80	New

Samples available for all products.