



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

New Generation IGBT Modules Offer Higher Thermal Efficiency

Configured as single switches (with or without an antiparallel diode) and choppers, these modules are the ideal choice for high frequency power applications. A choice of PT, NPT, and Trench IGBT technologies allows them to be used with switching frequencies from 1 kHz to 150 kHz. Offered in the standard SOT-227 package, the devices feature 600 V / 650 V and 1200 V voltage ratings and current handling up to 250 A.

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 the SOT-227 allows the design of a full electronic inverter for industrial applications

Part Number	Circuit	V_{CES}	I_c at T_c		Note
		(V)	(A)	(°C)	
VS-GT80DA60U	Single Switch With Diode	600	85	90	New
VS-GT80DA120U	Single Switch With Diode	1200	93	90	New
VS-GB90DA120U	Single Switch With Diode	1200	90	90	
VS-GB90SA120U	Single Switch No Diode	1200	90	90	
VS-GB90DA60U	Single Switch With Diode	600	90	90	
VS-GT100DA120UF	Single Switch With Diode	1200	123	90	New
VS-GT120DA65U	Single Switch With Diode	650	120	90	
VS-GT140DA60U	Single Switch With Diode	600	140	90	
VS-GT180DA120U	Single Switch With Diode	1200	185	90	New
VS-GA200SA60UP	Single Switch No Diode	600	100	100	
VS-GB55LA120UX	Chopper Low Side	1200	57	80	
VS-GB55NA120UX	Chopper High Side	1200	57	80	
VS-GB75LA60UF	Chopper Low Side	600	76	80	
VS-GB75NA60UF	Chopper High Side	600	76	80	
VS-GT105LA120UX	Chopper Low Side	1200	92	80	
VS-GT105NA120UX	Chopper High Side	1200	92	80	

Samples available for all products