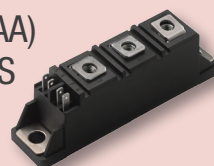




Vishay Intertechnology, Inc.

Diode and Thyristor Modules

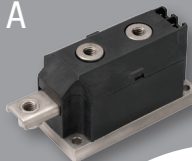
ADD-A-PAK
(TO-240AA)
MODULES



INT-A-PAK
(34 mm)
MODULES



MAGN-A-PAK
MODULES
Up to 320 A



SUPER
MAGN-A-PAK
MODULES
Up to 600 A



**HIGH-CURRENT NON-
ISOLATED SCHOTTKY**
MODULES
45 V to 150 V



ULTRAFAST FRED Pt[®]
DIODE IN SOT-227
200 A, 400 V



ULTRAFAST 1200 V
HEXFRED[®] DUAL
DIODE MODULES
IN SOT-227
200 A, 1200 V





DIODE AND THYRISTOR MODULES

Focus Products

Standard Diode Modules

	Series	V_{RRM} (V)	$I_{F(AV)}$ (A)	Max. V_F (V) at 25 °C	I_{FSM} (A)	Package
	VS-T20HF220	2200	20	1.30	380	T-Module
	2200 V isolated single diode; suitable for solar applications; UL-approved					
	VS-VSKD91/16	1600	60	1.60	1300	ADD-A-PAK (TO-240AA)
	Gen 7 ADD-A-PAK module; UL-approved; isolated phase-leg module; common cathode and common anode configurations available; lower current and voltage available in same package					
	VS-VSKD166/16PbF	1600	165	1.43	4000	INT-A-PAK
	UL-approved; isolated phase-leg module; common cathode and common anode configurations available; lower voltage available in same package					
	VS-VSKD236/16PbF	1600	230	1.46	5500	INT-A-PAK
	UL-approved; isolated phase-leg module; common cathode and common anode configurations available; lower current available in same package					
	VS-VSKD250-20PbF	2000	250	1.29	7015	MAGN-A-PAK
	UL-approved; isolated phase-leg module; common cathode and common anode configurations available; lower voltage available in same package					
	VS-VSKD320-20PbF	2000	320	1.28	10 110	MAGN-A-PAK
	UL-approved; isolated phase-leg module; common cathode and common anode configurations available; lower voltage available in same package					
	VS-VSKD600-20PbF	2000	600	1.45	20 100	Super MAGN-A-PAK
	UL-approved; isolated phase-leg module; lower voltage available in same package					

Thyristor Modules

	Series	V_{RRM} (V)	$I_{F(AV)}$ (A)	Max. V_F (V) at 25 °C	I_{FSM} (A)	Package
	VS-VSKT105/16	1600	105	1.80	2000	ADD-A-PAK (TO-240AA)
	Gen 7 ADD-A-PAK module; UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available; lower current and voltage available in same package					
	VS-VSKT136/16PbF	1600	135	1.57	3200	INT-A-PAK
	UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available; lower current and voltage available in same package					
	VS-VSKT162/16PbF	1600	160	1.54	4870	INT-A-PAK
	UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available; lower current and voltage available in same package					
	VS-VSKT320-16PbF	1600	320	1.37	9000	MAGN-A-PAK
	UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available; lower current and voltage available in same package					
	VS-VSKT500-16PbF	1600	500	1.50	17 800	Super MAGN-A-PAK
	UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available					
	VS-VSKT570-18PbF	1800	570	1.50	17 800	Super MAGN-A-PAK
	UL-approved; isolated phase-leg SCR module; diode-thyristor configuration available; lower voltage available					
	VS-VSKS500/08PbF	800	500	1.1	16 646	MAP Block Power
	UL-approved; isolated single SCR module					



DIODE AND THYRISTOR MODULES

Focus Products

Ultrafast Modules

	Series	V _{RRM} (V)	I _{F(AV)} (A)	Max. V _F (V) at 25 °C	T _{rr} (ns) at 25 °C - High I _F	Q _{rr} (nC) at 125 °C - High I _F	Package
	VS-UFB130FA40	400	130	1.37	86	1400	SOT-227
	UL-approved; T _J = 175 °C; isolated dual ultrafast FRED Pt® diode module; 200 V and 600 V also available; low thermal resistance						
	VS-UFB280FA40	400	280	1.24	93	1740	SOT-227
	UL-approved; T _J = 175 °C; isolated dual ultrafast FRED Pt® diode module; 200 V also available; low thermal resistance						
	VS-UFL230FA60	600	230	1.44	104	2200	SOT-227
	UL-approved; T _J = 175 °C; isolated dual ultrafast FRED Pt® diode module; lower t _{rr} (83 ns) also available; low thermal resistance						
	VS-UFB310CB40	400	310	1.3	89	400	SOT-227
	Non-isolated; T _J = 175 °C; common cathode dual ultrafast FRED Pt® diode module; 600 V also available						
	VS-HFA220FA120	1200	220	4.7	157	2850	SOT-227
UL-approved; isolated dual ultrafast FRED Pt® diode module; 200 V also available; low thermal resistance; lower current also available							
	VS-VSUD400CW60	600	400	1.45	90	4730	TO-244 (TO-244AB)
	UL-approved; non-isolated; T _J = 175 °C; common cathode FRED Pt® diode module						
	VS-VSKDU162/12PbF	1200	110	2.5	150	2000	INT-A-PAK
	UL-approved; isolated ultrafast HEXFRED® diodes phase-leg module						
	VS-UFB250FA60	600	170	1.19	166	3500	SOT-227
	UL-approved; T _J =175 °C; isolated dual ultrafast FRED Pt® diodes module						
	VS-UFB211FA40	400	280	1.24	93	1740	SOT-227
	UL-approved; T _J =175 °C; isolated dual ultrafast FRED Pt® diodes module; extremely low thermal resistance						
	VS-HFA70FA120	1200	70	3	134	790	SOT-227
	UL-approved; isolated dual ultrafast HEXFRED® diodes module; antiparallel pin-out						
	VS-HFA70EA120	1200	70	3	145	910	SOT-227
UL-approved; non-isolated; T _J =175 °C; common cathode FRED Pt® diodes module							
	VS-VSKEF500/06PBF	600	500	1.4	138	3340	INT-A-PAK
	UL-approved; isolated ultrafast diode; FRED Pt® Gen 4 single-switch module with with ultrasoft reverse recovery current						

Schottky Modules

Series		V _{RRM} (V)	I _{F(AV)} (A)	Max. V _F (V) at 25 °C	I _{FSM} (A)	Package
	VS-241NQ045PbF	45	240	0.8	3450	HALF-PAK (D-67)
	Non-isolated; cathode-to-base Schottky diode module; T _j = 175 °C					
	VS-243NQ100PbF	100	240	0.95	3300	HALF-PAK (D-67)
Non-isolated; cathode-to-base Schottky diode module; T _j = 175 °C						
	VS-301CNQ045PbF	45	300	0.9	3200	TO-244 (TO-244AB)
	Non-isolated; common cathode Schottky diode module; T _j = 175 °C					
	VS-403CNQ100PbF	100	400	1.07	3300	TO-244 (TO-244AB)
Non-isolated; common cathode Schottky diode module; T _j = 175 °C						
	VS-VSKCS408/060	60	400	1.09	3300	ADD-A-PAK (TO-240AA)
	Gen 7 ADD-A-PAK module; isolated; UL-approved; dual diode (common cathode) Schottky diode module; T _j = 175 °C					
	VS-VSKDS409/150	150	400	1.33	2300	ADD-A-PAK (TO-240AA)
	Gen 7 ADD-A-PAK module; isolated; UL-approved; dual diode (phase-leg) Schottky diode module; T _j = 175 °C					
	VS-VSKCS409/150	150	400	1.33	2300	ADD-A-PAK (TO-240AA)
Gen 7 ADD-A-PAK module; isolated; UL-approved; dual diode (common cathode) Schottky diode module; T _j = 175 °C						

VISHAY RECTIFIER POWER MODULES: THE BEST SOLUTION FOR INPUT / OUTPUT RECTIFICATION

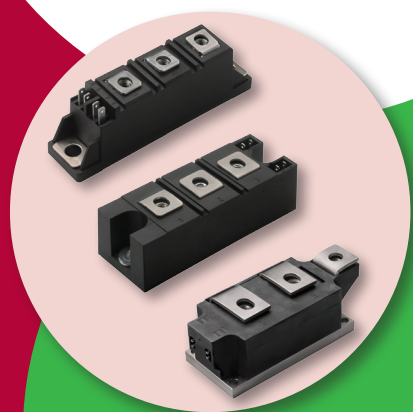


Advantages of Vishay Modules

- Wide current and voltage range (standard diode / SCR modules, ultrafast, and Schottky)
- UL-approved - high isolation voltage
- Wide variety of V_F / t_{rr} trade-offs on ultrafast diode modules
- FRED Pt® and HEXFRED® provide ultrasoft recovery current shape

For the Following Applications

- Welding (input and output rectification)
- UPS
- Motor drives
- Switch mode power supplies



Vishay provides reliable and complete solutions for input and output rectification with state-of-the-art of silicon technology and power packages



Useful Links

- Modules, Thyristor
www.vishay.com/modules/thyristor-modules/
- Modules, Diode
www.vishay.com/modules/diode-modules/
- Power Modules
www.vishay.com/doc?49382



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