



SEMICONDUCTORS:
Rectifiers • High-Power Diodes and Thyristors • Small-Signal Diodes • Zener and Suppressor Diodes
• FETs • RF Transistors • Optoelectronics • ICs • Modules

PASSIVE COMPONENTS:
Resistive Products • Magnetics • Capacitors • Strain Gage Transducers and Stress Analysis Systems



VISHAY INTERTECHNOLOGY, INC.



POWER DIODE AND SCR MODULES

Versatile and high-efficiency power diode and SCR modules from Vishay Intertechnology feature industry-standard outlines with a choice of diode and thyristor rectifiers. Offering single-rectifying/switch component, half-bridge, and center-tapped configurations, these modules are the ideal choice for input rectification applications at either low or high voltages.

Vishay modules fulfill a single or composite function within a single package that offers a thermally conductive, but electrically isolated, path to the outside circuit. This electrical isolation between the baseplate and the active semiconductors provides a key advantage over discrete components. The modules are RoHS-compliant and meet industry standards for safety, including UL approval.

State-of-the-art compression bonding (for current ratings higher than 250 A) and ultrasonic aluminum wire bonding technologies allow the modules to achieve outstanding performance. Vishay's high-power modules are recognized throughout the world for their ruggedness, high reliability, and consistency of mechanical specifications and electrical characteristics.

Features

- Wide range of industry-standard package styles
- Direct mounting on heatsink
- Choice of rectifier and thyristor technologies
- Optimized high-voltage diode and SCR
- Fast-recovery diode modules available
- High isolation voltage (2500 V)
- RoHS-compliant
- Low thermal resistance
- Low-/high-temperature performance (-40 °C to +150 °C)
- UL approved

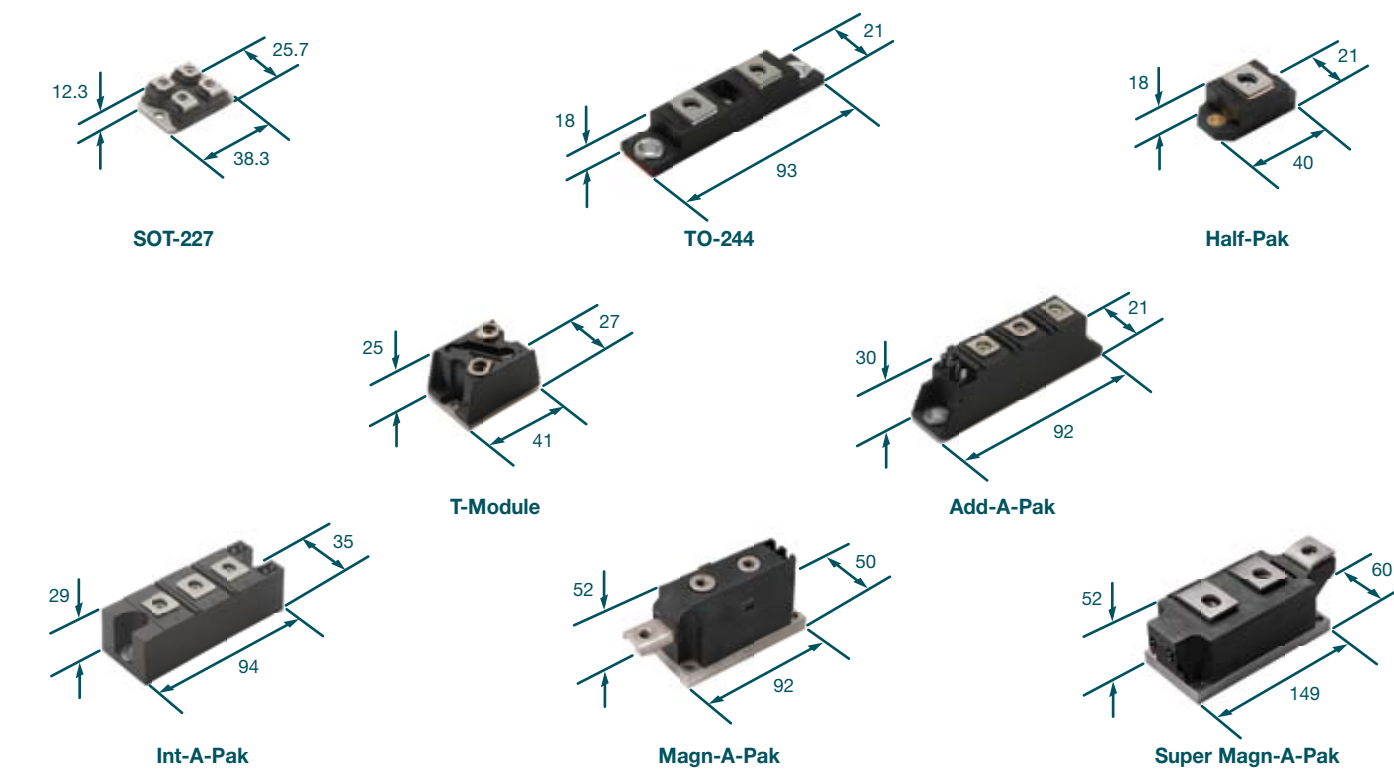
Options

- Customizable for specific application needs
- Gate and auxiliary cathode accessories available upon request

Applications

- Single- and three-phase input rectification
- Industrial welding
- Switch-mode power supplies
- Motor drives
- UPS
- Anti-parallel thyristor (AC switch)

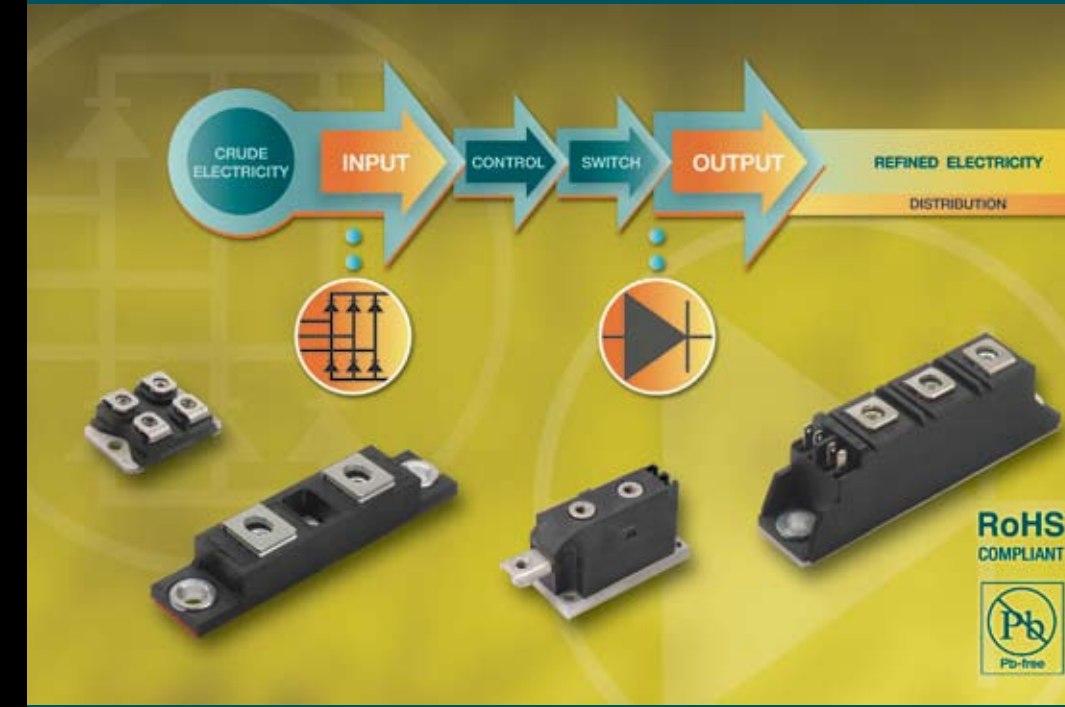
Dimensions in Millimeters



Vishay Intertechnology

www.vishay.com

HIGH POWER PRODUCTS
SELECTOR GUIDE



POWER DIODE AND SILICON-CONTROLLED RECTIFIER (SCR) MODULES

SOT-227

TO-244

Half-Pak

T-Module

Add-A-Pak

Int-A-Pak

Magn-A-Pak

Super Magn-A-Pak

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

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MODULES								
Package Model	Max. Dim. LWH (mm)	Pinout	Number of Connectors	Available Circuit Configurations	Voltage Range (V)	Current Ratings (A)	Part Number Series	Silicon Technology
SOT-227	38.3 x 25.7 x 12.3	Screwable	4	2 Separate diodes	400-1200	80-210	UFB-UFL	Ultrafast Diode
				Customized configuration			HFA	
				2 Separate diodes	1000	60	SA60FA100P	Fast diode
TO-244	93 x 21 x 18	Screwable	2 + Baseplate	Common cathode— not isolated	45-150	200-400	2..CNQ...-3..CNQ...-4..CNQ...	Schottky Diode
					30	200-400	220CNQ...-440CNQ...	Schottky Diode
					400-600	167-320	HFA..NJ..PBF	Ultrafast Diode
					400-600	360-400	VSUD..CW...	Ultrafast Diode
					200	400	VSUD400CW20PBF	Ultrafast Diode
Half-Pak	40 x 21 x 18	Screwable	1 + Baseplate	Single diode cathode on base	45-150	120-240	12..NQ...-18..NQ...-24..NQ...	Schottky Diode
					30	120-240	122NQ...-182NQ...-242NQ...	Schottky Diode
					400	180-275	HFA..NH40PBF	Ultrafast Diode
					200	240	VSUD200CH20PBF	Ultrafast Diode
					600	200	VSUD200CH60PBF	Ultrafast Diode
T-Module	41 x 27 x 25	Screwable	Up to 3	Single SCR	400-1600	40-110	T..RIA	SCR
					400-1600	40-110	T..HF	Diode
					600-1200	40-85	T..HFL	Fast Diode
							VSKT	SCR
							VSKD	Diode
Add-A-Pak AAP	92 x 21 x 30	Screwable	Up to 7	Half bridge	400-1600	25-105	VSKH-VSKL	SCR-Diode
							VSKU	SCR
							VSKC	Diode
							VSKV	SCR
							VSKJ	Diode
				Common cathode	400-1600	25-105	VSKU	SCR
					400-1600	25-105	VSKC	Diode
					400-1600	25-105	VSKV	SCR
					400-1600	25-105	VSKJ	Diode
					400-1600	25-105	VSKV	SCR
Common anode	400-1600	25-105	VSKU	SCR				
	400-1600	25-105	VSKC	Diode				
	400-1600	25-105	VSKV	SCR				
	400-1600	25-105	VSKJ	Diode				
	400-1600	25-105	VSKV	SCR				
Int-A-Pak IAP	94 x 35 x 29	Screwable	Up to 7	Half bridge	400-1600	130-230	VSKT	SCR
							VSKD	Diode
							VSKH-VSKL	SCR-Diode
							VSKU	SCR
							VSKC	Diode
				Common cathode	400-1600	130-230	VSKU	SCR
					400-1600	130-230	VSKC	Diode
					400-1600	130-230	VSKV	SCR
					400-1600	130-230	VSKJ	Diode
					400-1600	130-230	VSKV	SCR
Common anode	400-1600	130-230	VSKU	SCR				
	400-1600	130-230	VSKC	Diode				
	400-1600	130-230	VSKV	SCR				
	400-1600	130-230	VSKJ	Diode				
	400-1600	130-230	VSKV	SCR				
Magn-A-Pak MAP	92 x 50 x 52	Screwable	Up to 7	Half bridge	400-2000	170-320	VSKT	SCR
					800-1200	180-200	VSKTF	SCR fast
					400-2000	170-320	VSKD	Diode
					400-2500	240	VSKDL	Diode Fast
					400-2000	170-320	VSKH-VSKL -VSKL	SCR-Diode
				Common cathode	800-1200	180-200	VSKHF...-VSKLF...	SCR fast-Diode Fast
					400-2000	170-320	VSKU	SCR
					800-1200	180-200	VSKC	Diode
					400-2500	240	VSKUF	SCR fast
					400-2000	170-320	VSKCL	Diode Fast
Common anode	400-2000	170-320	VSKV	SCR				
	800-1200	180-200	VSKJ	Diode				
	400-2500	240	VSKVF	SCR fast				
	400-2000	170-320	VSKJL	Diode Fast				
	400-2000	170-320	VSKL	Diode				
Single diode	400-2500	240	VSKEL	Diode Fast				
	400-2000	170-320	VSKS500...PBF	SCR				
	400-800	500	VSKT	SCR				
	400-2000	430-600	VSKD	Diode				
	1600-2500	450	VSKDL	Fast Diode				
Super Magn-A-Pak SMAP	149 x 60 x 52	Screwable	Up to 7	Half bridge	400-2000	430-600	VSKH-VSKL	SCR-Diode
					400-2000	430-600	VSKH-VSKL	SCR-Diode

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