

180 Lafayette Road North Hampton, NH 03862-2448 PH: 603-964-3165 FX: 603-964-3168 WWW.PDEELECTRONICS.COM

# **Rectifier Assemblies**

Single Phase Bridges, 20 Amp Ultra Super Fast Recovery S25AxxHE Series

#### **FEATURES**

- Current rating: 20 A
- Recovery Times: 40 ns
- PIVs: from 50 to 150V
- Surge Ratings: 100A
- Glass Passivated Diode
- Aluminum Case Electrically Insulated
- Black Anodized Case

## **DESCRIPTION**

This series of single-phase bridge offers the designer the ultimate in high current power supply applications. The standard recovery series allows operation at full power at frequencies, up to 20 kHz square wave, which is often used in choppers and inverters.

## ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage	
Maximum Average D.C. Output Current	See Electrical Specifications
Non-Repetitive Sinusoidal Surge (8.3mS)	See Electrical Specifications
Operating and Storage Temperature Range.	55°C to +150°C
Typical Thermal Resistance Junction to Ca	se 1.75°C/W

Electrical Specifications (at 25°C unless noted)					Maximum Ratings			
Туре	PIV Per Leg	Maximum Forward Voltage Drop / Leg	Leakage Current Per Leg *2		Maximum Reverse Recovery Time	Maximum Average D.C. Output Current		Non-Repetitive Sinusoidal Surge (8.3mS) *4
		*1	$T_A=25^{\circ}C$	T <sub>A</sub> =100°C	*3	T <sub>C</sub> =25°C	$T_C = 100^{\circ}C$	$T_A = 100^{\circ}C$
	Volts	Volts	μΑ	μΑ	nS	Amps	Amps	Amps
S25A05HE S25A10HE S25A15HE	50 100 150	1.0 1.0 1.0	10 10 10	100 100 100	40 40 40	20 20 20	12.5 12.5 12.5	100 100 100

\*1) Ifpeak=9.0A, Tp=300uS, Duty Cycle  $\leq 2\%$ 

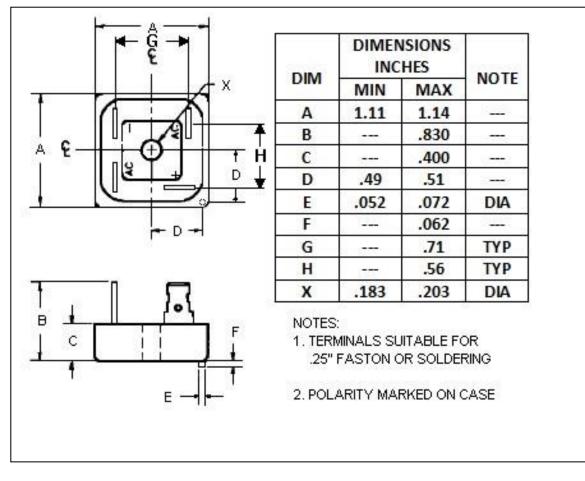
\*2) Vrpeak=PIV, Tp=300uS, Duty Cycle  $\leq 2\%$ 

\*3) Discrete Rectifiers Measured Prior To Assembly, If=.5A, Ir=1A, Irr=.25A.

\*4) Tp=8.3mS, Half Sine Pulse Super imposed On Rated Load

Specifications subject to change without notice to ensure a better product **PD&E Electronics** 180 Lafayette Rd. North Hampton, NH 03862 Ph: (603) 964-3165 Fx: (603) 964-3168 Web: WWW.PDEELECTRONICS.COM

#### Marking (optional)



Alternate Current Input	A.C.	Yellow
Cathode- Positive Output	+	Red
Anode- Negative Output	-	Grey