

Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638 Phone: (562) 404-7855 * Fax: (562) 404-1773 ssdi@ssdi-power.com * www.ssdi-power.com

DESIGNER'S DATA SHEET

Part Number / Ordering Information 1/

SPA560

 \Box Screening $\underline{^{2/}}$ _ =

___ = Not Screened

 $\overline{TX} = TX \text{ Level}$ TXV = TXV Level

S = S Level

Lead Bend

= Straight Leads

 $\overline{\mathrm{UB}} = \mathrm{Up} \; \mathrm{Bend}$

DB = Down Bend

Voltage/Family J = 600 V

K = 800 V

M = 1000 V

SPA560 Series

22A / 600-1000V THREE PHASE BRIDGE RECTIFIER ASSEMBLY ULTRA FAST – 70 ns

Features:

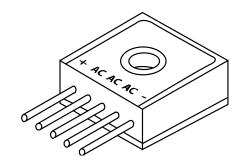
- Higher Blocking Voltage Available. Contact Factory.
- Average Output Current 22 Amps
- Low Reverse Leakage Current
- Constructed with Void-free, Hermetically Sealed Discretes
- Aluminum Case for Maximum Thermal Conductivity
- Small Package Size (0.89 x 0.89 x 0.39")
- TX and TXV & S Level Screening Available
- Superior Replacement for Sensitron S455DC, S455FC, & S455GC
- Standard, Fast, & Hyper Fast Versions Available. Contact Factory.

Maximum Ratings ^{3/}		Symbol	Value	Units	
Peak Inverse Voltage	SPA560J SPA560K SPA560M	PIV	600 800 1000	Volts	
Average Rectified Output Current (T _C = Case Temperature)	$T_C = 55^{\circ}C$ $T_C = 100^{\circ}C$	I _{O1} I _{O2}	22 15	Amps	
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, Superimposed on Rated Load)		I_{FSM}	125	Amps	
Operating & Storage Temperature		Top & Tstg	-55 to +150	°C	
Maximum Thermal Resistance, Junction to Case		$R_{ heta JC}$	1.25	°C/W	

SPA560

Notes:

- 1/ For Ordering Information, Price, and Availability Contact Factory.
- 2/ Screened to MIL-PRF-19500.
- <u>3</u>/ Unless Otherwise Specified, All Maximum Ratings/Electrical Characteristics @25°C.





SPA560 Series

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Electrical Characteristic ^{3/}		Symbol	Min	Тур	Max	Units
Maximum Forward Voltage Per Leg (T _A = 25°C, pulsed)	$I_F = 3A$ $I_F = 9A$	$egin{array}{c} \mathbf{V_{F1}} \ \mathbf{V_{F2}} \end{array}$	_	_	1.40 1.75	Volts
Reverse Leakage Current (Rated PIV, T _A = 25°C)		I_{R1}	_	_	10	μА
Reverse Leakage Current (Rated PIV, T _A = 100°C)		I_{R2}	_	_	250	μА
Isolation Resistance	1500V	R _{ISO}	_	_	10	ΜΩ
Reverse Recovery Time $(I_F = 500 \text{ mA}, I_R = 1 \text{ A}, I_{RR} = 250 \text{ mA}, T_A = 25^{\circ}\text{C}$ (Measured on discrete rectifiers prior to assembly)		trr	_	_	70	ns

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