



Solid State Devices, Inc.

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SPD10192 Thru SPD10198

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SPD10

Screening ^{2/} ___ = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

Pin Configuration ___ = Normal (Cathode to Stud)
(See Table 1) R = Reverse (Anode to Stud)

Family/Voltage 192 = 800V
194 = 1000V
195 = 1100V
196 = 1200V
197 = 1300V
198 = 1400V

**35 Amp
FAST RECOVERY
RECTIFIER
800 - 1400 Volt
250 nsec**

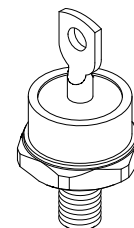
Features:

- Fast Recovery: 250 nsec maximum
- PIV to 1400V
- Low Reverse Leakage Current
- Hermetically Sealed
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
- Ultra Fast and Hyper Fast Recovery Versions Available*
- For Reverse Polarity Add Suffix "R"
- TX, TXV, and S-Level Screening Available ^{2/}

*Contact Factory

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SPD10192 SPD10194 SPD10195 SPD10196 SPD10197 SPD10198 V_{RRM} V_{RWM} V_R	800 1000 1100 1200 1300 1400	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)	I_o	35	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)	I_{FSM}	500	Amps
Operating & Storage Temperature	$T_{OP} \text{ \& } T_{STG}$	-65 to +150	$^\circ\text{C}$
Maximum Total Thermal Resistance Junction to Case	$R_{\theta JC}$	1.0	$^\circ\text{C/W}$

DO-5:



Notes:

- 1/ For ordering information, price, operating curves, and availability- contact factory.
2/ Screening based on MIL-PRF-19500. Screening flows available on request.

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RC0132A

DOC



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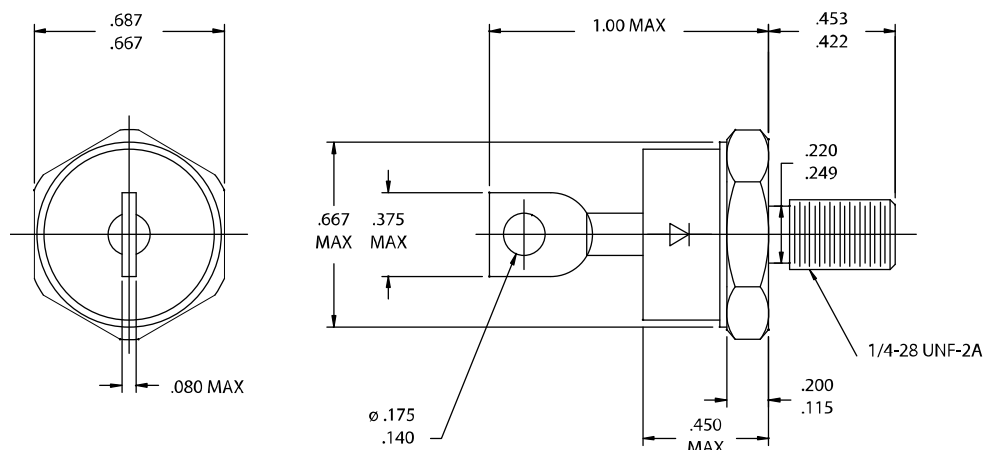
**SPD10192
Thru
SPD10198**

Electrical Characteristics		Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 35 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs pulse)		V_F	1.4	V_{DC}
Instantaneous Forward Voltage Drop ($I_F = 35 \text{ A dc}$, $T_A = -55^\circ\text{C}$, 300 μs pulse)		V_F	1.6	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)		I_R	20	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)		I_R	2	mA
Reverse Recovery Time ($I_F = 500 \text{ mA}$, $I_R = 1 \text{ Amp}$, $I_{RR} = 250 \text{ mA}$, $T_A = 25^\circ\text{C}$)		t_{RR}	250	nsec
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	250	pF

Table 1- PIN ASSIGNMENT

Code	Configuration	Terminal	Stud
—	Normal	Anode	Cathode
R	Reverse	Cathode	Anode

DO-5 Outline (Normal Pin Configuration Shown):



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