



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638-5223

Phone: (562) 404-4474 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

SED10HB100, SED10HE100 and SED10HF100

10 A / 100 V Schottky Rectifier

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SED10

Screening ^{2/}

— = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Voltage 100 = 100 V

Package

HB = Sedpack 1

HE = Sedpack 1 with Lead

HF = Sedpack 1 with Lead, Reverse Polarity

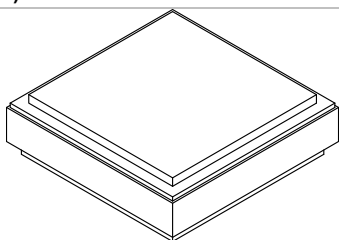
FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed Power Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 150°C Operating Temperature
- TX, TXV, and Space Level Screening Available ^{2/}. Consult Factory.

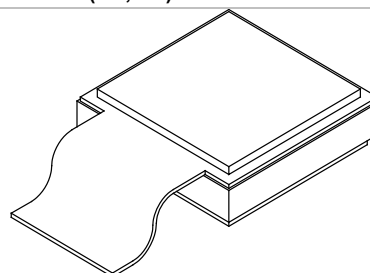
MAXIMUM RATINGS ^{3/}

		Symbol	Value	Units
Peak Repetitive and Peak Reverse Voltage		V_{RRM} V_R	100	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_C = 100^\circ\text{C}$)		I_O	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_O , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$)		I_{FSM}	175	Amps
Operating & Storage Temperature		T_{OP} & T_{stg}	-55 to +175	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	SED10HB100 SED10HE100 SED10HF100	$R_{\theta JC}$	1.25 1.25 3.00	$^\circ\text{C/W}$

SEDPACK 1 (HB)



SEDPACK 1 with Lead (HE, HF)



NOTES:

^{1/} For ordering information, price, operating curves, and availability - contact factory.

^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.

^{3/} Unless otherwise specified, all electrical characteristics @25°C.

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

DATA SHEET #: SH0028D

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ELECTRICAL CHARACTERISTICS ^{3/}	Symbol	Maximum	Units
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 - 500 μsec pulse)	$I_F = 10 A_{DC}$ V_{F1}	0.75	V_{DC}
Instantaneous Forward Voltage Drop ($T_A = +125^\circ\text{C}$, 300 - 500 μsec pulse)	$I_F = 10 A_{DC}$ V_{F2}	0.63	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μsec pulse minimum)	I_{R1}	1.0	mA
Reverse Leakage Current (Rated V_R , $T_A = +125^\circ\text{C}$, 300 μsec pulse minimum)	I_{R2}	10	mA
Junction Capacitance ($V_R = 10V$, $f = 1\text{MHz}$, $T_A = 25^\circ\text{C}$)	C_J	600	pF

NOTES:

1/ For Ordering Information, Price, Operating Curves, and Availability Contact Factory.

2/ Screened to MIL-PRF-19500.

3/ Unless Otherwise Specified, All Electrical Characteristics @ 25°C

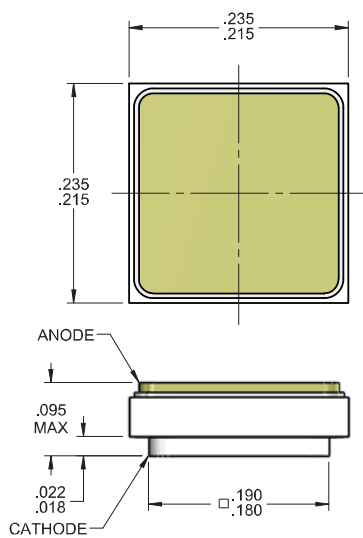
Available Part Numbers:

SED10HB100, SED10HE100, and SED10HF100

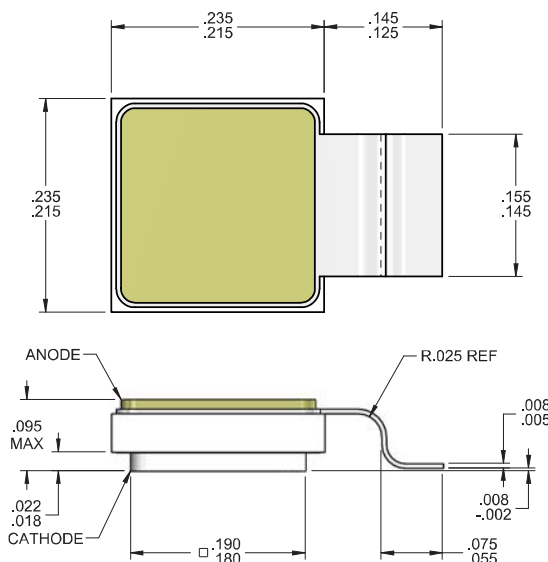
PIN ASSIGNMENT

Package	TOP	BOTTOM	LEAD
Sedpack (HB)	Anode	Cathode	---
Sedpack with Lead (HE)	Anode	Cathode	Anode
Sedpack with Lead (HF)	Cathode	Anode	Cathode

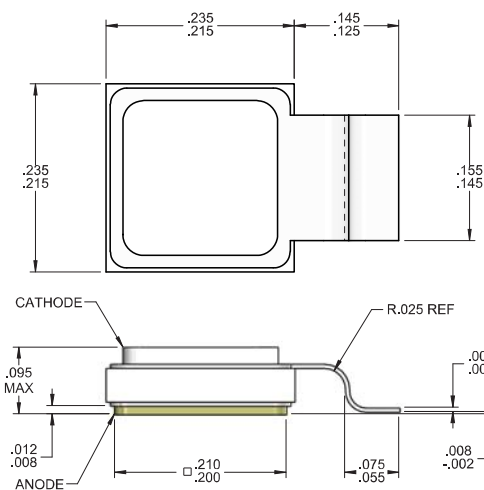
**Package Outline:
SED10HB100**



**Package Outline:
SED10HE100**



**Package Outline:
SED10HF100**



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