



Solid State Devices, Inc.

14701 Firestone Blvd. * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SED10HB200, SED10HE200 and SED10HF200

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SED10__200__

L Screening^{2/}__ = None
TX = TX Level
TXV = TXV Level
S = S Level

L Configuration

HB = without lead
HE = with lead
HF = with lead, reverse polarity

**10 AMP
200 VOLTS
SCHOTTKY RECTIFIER**

FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Hermetically Sealed Power Surface Mount Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 175°C Operating Temperature
- TX, TXV, and Space Level Screening Available^{2/}

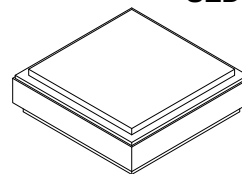
MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage		V_{RRM} V_{RWM} V_R	200	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 100^\circ\text{C}$)		I_O	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, 1 pulse, $T_A = 25^\circ\text{C}$)		I_{FSM}	100	Amps
Operating and Storage Temperature		$T_{OP} \& T_{stg}$	-55 to +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	SED10HB200 SED10HE200 SED10HF200	$R_{\theta JC}$	2 (typ 1.6) 2 (typ 1.6) 5.00	$^\circ\text{C/W}$

Notes:

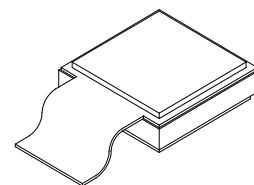
^{1/} For ordering information, price, operating curves, and availability – Contact factory.

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

SEDPACK 1



HB Series



HE / HF Series

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

DATA SHEET #: SH0069A

DOC



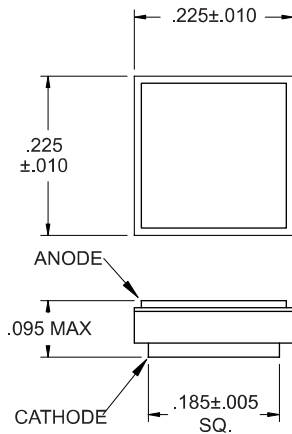
Solid State Devices, Inc.

14701 Firestone Blvd. * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

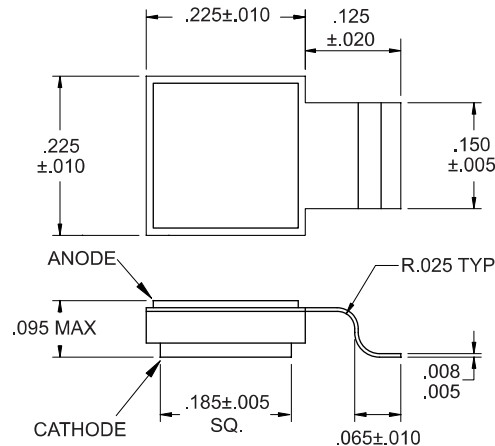
SED10HB200, SED10HE200 and SED10HF200

ELECTRICAL CHARACTERISTICS		Symbol	Maximum	Typical	Unit
Instantaneous Forward Voltage Drop ($I_F = 5 A_{DC}$, 300-500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F1}	-	0.92	V_{DC}
	$T_A = 25^\circ C$	V_{F2}	0.80	0.75	
	$T_A = 125^\circ C$	V_{F3}	0.70	0.61	
Instantaneous Forward Voltage Drop ($I_F = 10 A_{DC}$, 300-500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F4}	-	1.00	V_{DC}
	$T_A = 25^\circ C$	V_{F5}	0.85	0.78	
	$T_A = 125^\circ C$	V_{F6}	0.75	0.68	
Instantaneous Forward Voltage Drop ($I_F = 20 A_{DC}$, 300-500 μ sec Pulse)	$T_A = -55^\circ C$	V_{F7}	-	1.24	V_{DC}
	$T_A = 25^\circ C$	V_{F8}	0.95	0.85	
	$T_A = 125^\circ C$	V_{F9}	-	0.76	
Reverse Leakage Current (Rated V_R , 300 μ sec pulse minimum)	$T_A = 25^\circ C$	I_{R1}	10	0.7	μA
	$T_A = 100^\circ C$	I_{R2}	-	0.2	mA
	$T_A = 125^\circ C$	I_{R3}	5	0.85	mA
Junction Capacitance ($T_A = 25^\circ C$, $f = 1$ MHz)	$V_R = 5V$	C_{J1}	225	185	pF
	$V_R = 10V$	C_{J2}	-	135	

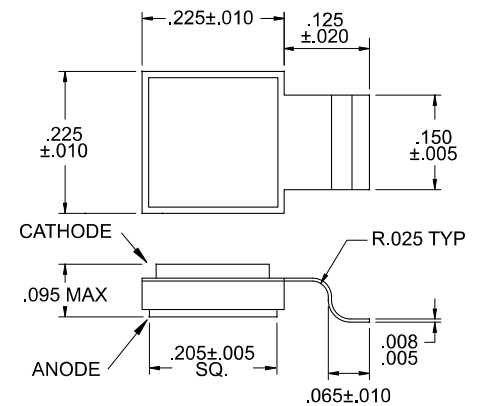
CASE OUTLINE: SED10HB200



CASE OUTLINE: SED10HE200



CASE OUTLINE: SED10HF200



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

DATA SHEET #: SH0069A

DOC