


Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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

SDR3595A2GW

**500 mW
125 VOLTS
ULTRA FAST RECOVERY
RECTIFIER**

Designer's Data Sheet

Part Number / Ordering Information ^{1/, 2/, 3/}

SDR3595A2

- -
- L

Screening ^{2/} = Not Screened

TX = TX Level

TXV = TXV Level

S = S Level

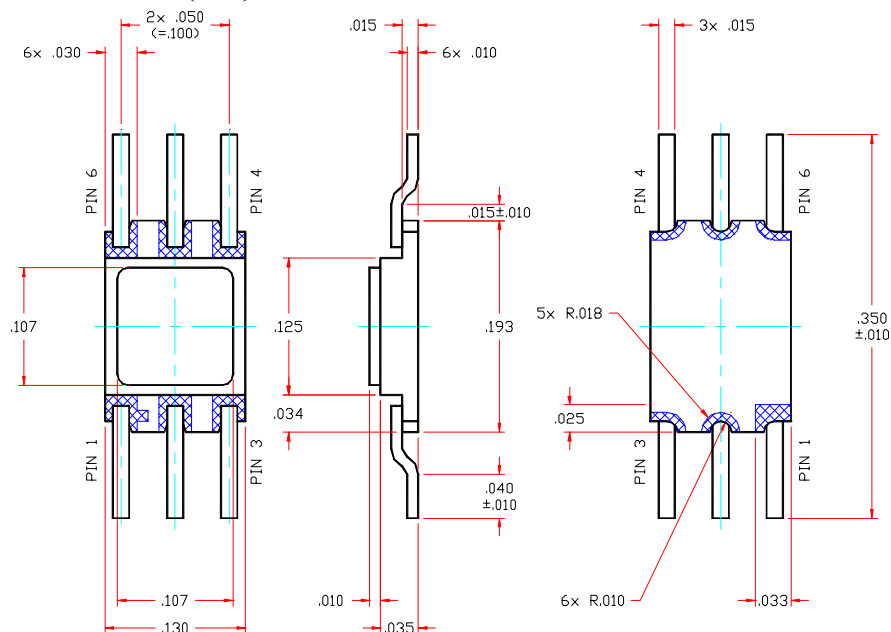
Package ^{3/} G = Gullwing

FEATURES:

- General Purpose Use in Computer and Industrial Service
- Operating Temperature Range -65°C to 175°C
- Power Dissipation 500 mW
- High Speed Replacement for 1N3595

MAXIMUM RATINGS		Symbol	Value	Units
Reverse Voltage		V_R	125	Volts
Peak Surge Current	(Pulse Width = 1 second) (Pulse Width = 1 μ s)	I_{FSM}	0.5 4	Amps
Power Dissipation @ $T_A=25^\circ\text{C}$ Derating Factor		P_D	500 3.3	mW mW/°C
Operating Temperature		T_J	-65 to +175	°C
Storage Temperature		T_{stg}	-65 to +200	°C

PACKAGE OUTLINE: GULLWING (GW)



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

DATA SHEET #: RU0002C
DOC



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ELECTRICAL CHARACTERISTICS ^{4/}		Symbol	Typ	Max	Units
Maximum Forward Voltage Drop ^{5/}	(I _F = 200 mA)	V _{F1}	0.98	1.00	Volts
	(I _F = 100 mA)	V _{F2}	0.92	0.96	
	(I _F = 50 mA)	V _{F3}	0.87	0.89	
	(I _F = 10 mA)	V _{F4}	0.79	0.81	
	(I _F = 5 mA)	V _{F5}	0.75	0.78	
	(I _F = 1 mA)	V _{F6}	0.68	0.70	
Maximum Reverse Leakage Current ^{5/}	(V _R = 125 V, T _A = 25°C)	I _{R1}	1.0	2.0	nA
	(V _R = 30 V, T _A = 125°C)	I _{R2}	35	3.0	nA
	(V _R = 125 V, T _A = 125°C)	I _{R3}	75	500	nA
	(V _R = 125 V, T _A = 150°C)	I _{R4}	0.5	3	μA
Max Junction Capacitance (V _R = 0 V, f = 1 MHz)		C _J	4	8	pF

REVERSE RECOVERY CHARACTERISTICS	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time (I _F = 10 mA, I _R = 10 mA, I _M = 1 mA)	t _{rr}	—	40	60	ns

NOTES:

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

2/ Screening per MIL-PRF-19500

3/ For Package Outlines Contact Factory.

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

5/ Pulsed

Available Part Numbers:
SDR3595A2GW

PIN ASSIGNMENT (Standard)						
Package	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
Gullwing	C1		A1	C2		A2



DATA SHEET APPROVAL FORM

Data Sheet Number RU0002 Rev B Check Box to Include on Web: X

Part Number(s): SDR3595A2GW

Approval	Sign	Date
Engineering Manager:	_____	_____
Executive / CEO	_____	_____
Operation Manager:	_____	_____
Marketing Manager:	_____	_____
Quality Manager:	_____	_____

Revisions

ECO No	REV	DATE	DESCRIPTION	APPROVAL
E-040019	B	01/15/04	Correction of typo's in datasheet	