

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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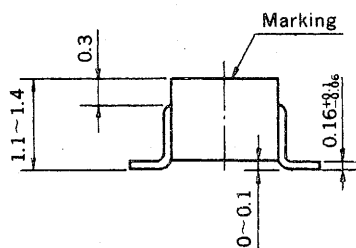
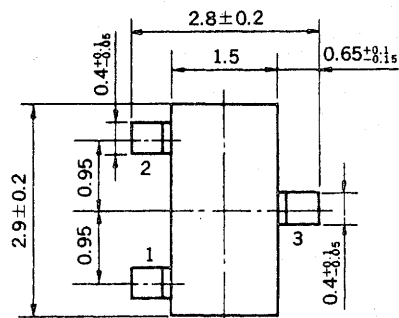
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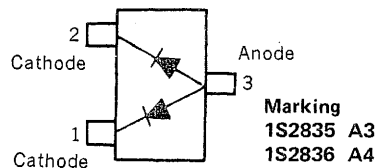
**Phase-out/Discontinued**

**HIGH SPEED SWITCHING  
SILICON EPITAXIAL DOUBLE DIODES : COMMON ANODE  
MINI MOLD**

**PACKAGE DIMENSIONS**  
in millimeters



**Connection Diagram  
(Top View)**



**FEATURES**

- Low capacitance:  $C_t = 2.5 \text{ pF TYP.}$
- High speed switching:  $t_{rr} = 4.0 \text{ ns MAX.}$
- Wide applications including switching, limiter, clipper.
- Double diode configuration assures economical use.

**ABSOLUTE MAXIMUM RATINGS**

Maximum Voltages and Currents ( $T_a = 25^\circ\text{C}$ )

		1S2835	1S2836	
Peak Reverse Voltage	$V_{RM}$	35	75	V
DC Reverse Voltage	$V_R$	30	50	V
Surge Current ( $1 \mu\text{s}$ )*	$I_{FSM}$	6.0	6.0	A
Surge Current ( $1 \mu\text{s}$ )	$I_{FSM}$	4.0	4.0	A
Peak Forward Current*	$I_{FM}$	450	450	mA
Peak Forward Current	$I_{FM}$	300	300	mA
Average Rectified Current*	$I_O$	150	150	mA
Average Rectified Current	$I_O$	100	100	mA

Maximum Temperatures

Junction Temperature	$T_j$	125	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +125	-55 to +125	$^\circ\text{C}$

Thermal Resistance

Junction to Ambient*	$R_{th(j-a)}$	1.0	1.0	$^\circ\text{C}/\text{mW}$
Junction to Ambient	$R_{th(j-a)}$	0.67	0.67	$^\circ\text{C}/\text{mW}$

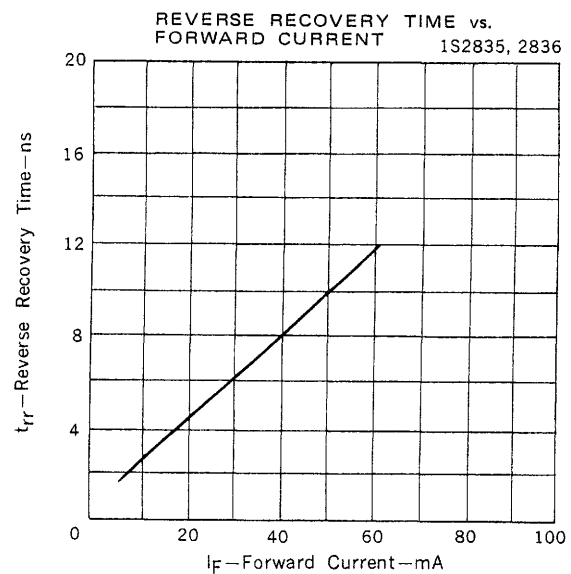
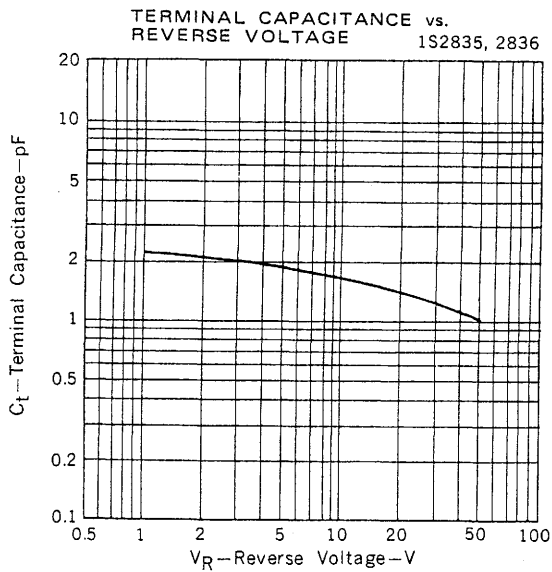
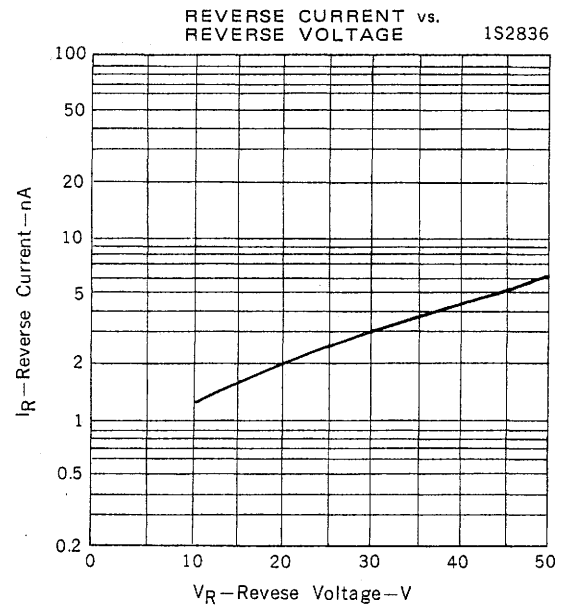
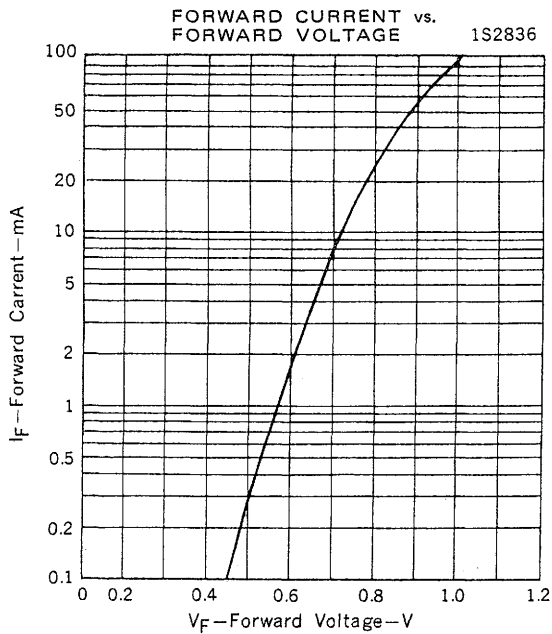
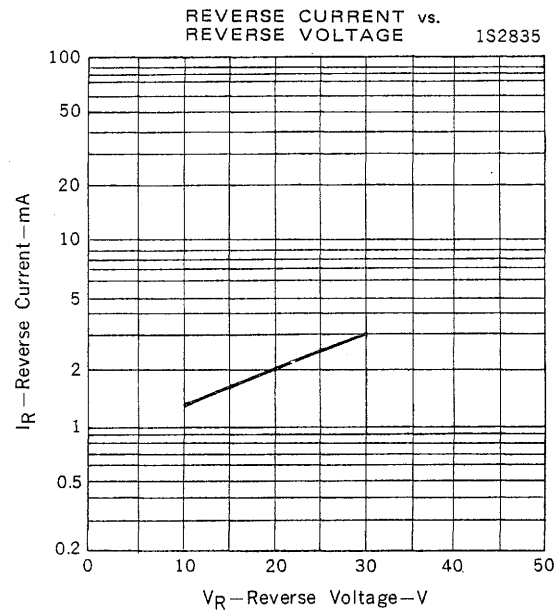
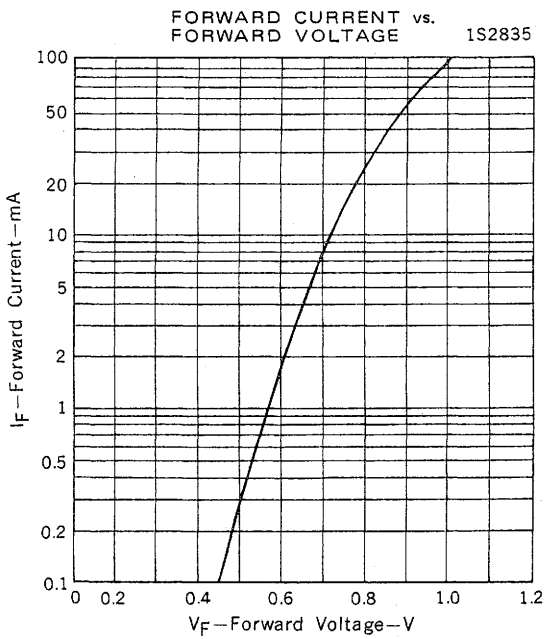
\* Both diodes loaded simultaneously.

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

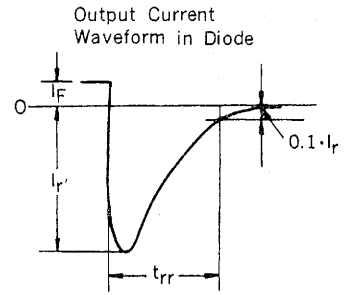
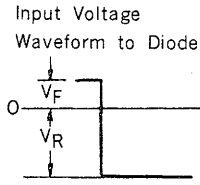
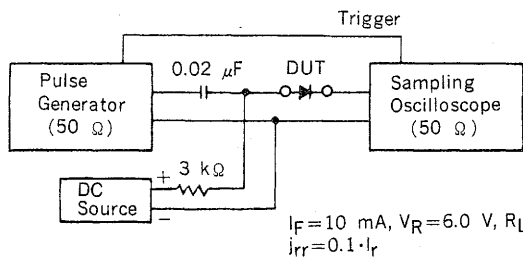
CHARACTERISTIC	SYMBOL	1S2835 (A3)			1S2836 (A4)			UNIT	TEST CONDITIONS
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
Forward Voltage	$V_{F1}$		0.72	1.0		0.72	1.0	V	$I_F = 10 \text{ mA}$
	$V_{F2}$		0.88	1.1		0.88	1.1	V	$I_F = 50 \text{ mA}$
	$V_{F3}$		1.0	1.2		1.0	1.2	V	$I_F = 100 \text{ mA}$
Reverse Current	$I_R$			0.1				$\mu\text{A}$	$V_R = 30 \text{ V}$
	$I_R$						0.1	$\mu\text{A}$	$V_R = 50 \text{ V}$
Capacitance	$C_t$		2.5	4.0		2.5	4.0	pF	$V_R = 0, f = 1.0 \text{ MHz}$
Reverse Recovery Time	$t_{rr}$			4.0			4.0	ns	See Test Circuit.

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REVERSE RECOVERY TIME ( $t_{rr}$ ) TEST CIRCUIT



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