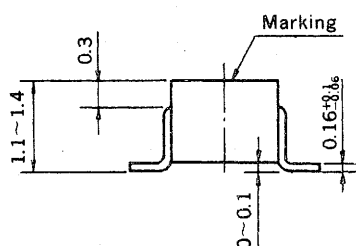
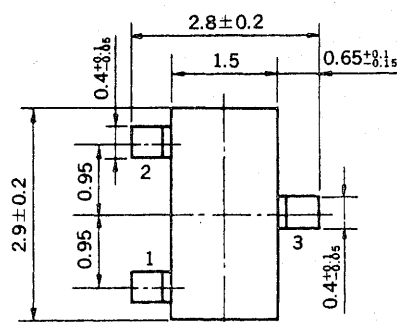
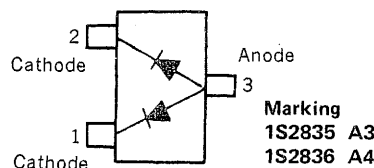


## HIGH SPEED SWITCHING SILICON EPITAXIAL DOUBLE DIODES : COMMON ANODE MINI MOLD

### PACKAGE DIMENSIONS in millimeters



### Connection Diagram (Top View)



### FEATURES

- Low capacitance:  $C_t = 2.5$  pF TYP.
- High speed switching:  $t_{rr} = 4.0$  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	$^\circ\text{C}/\text{mW}$

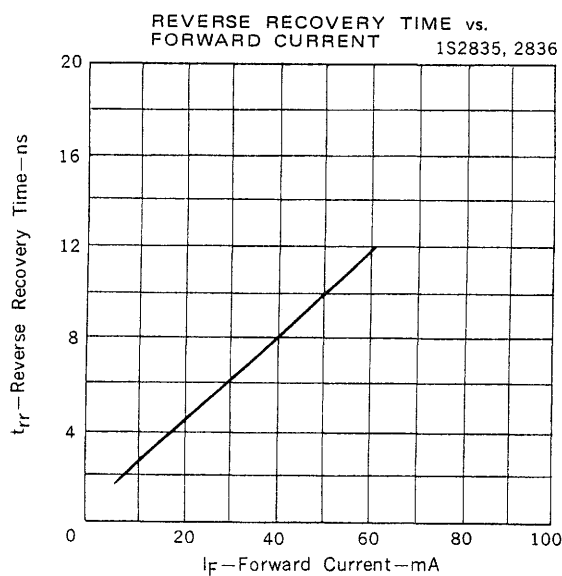
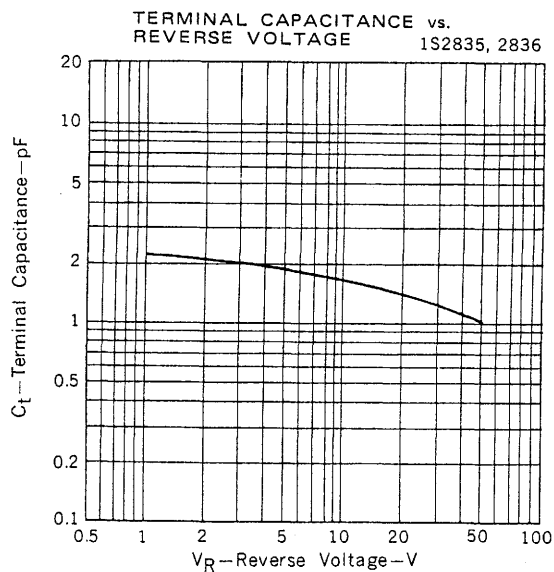
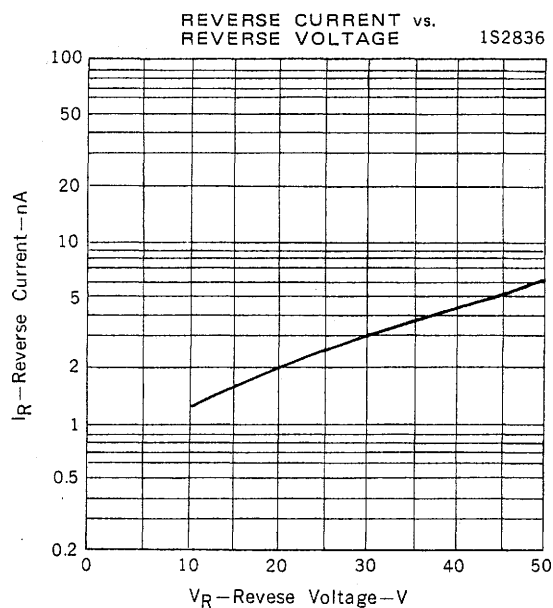
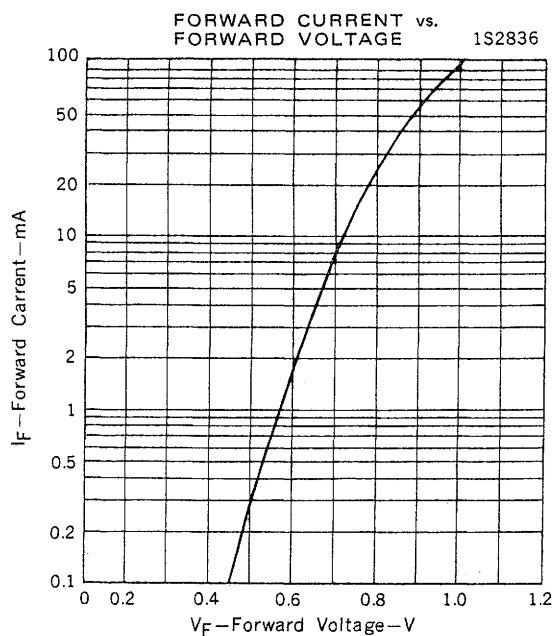
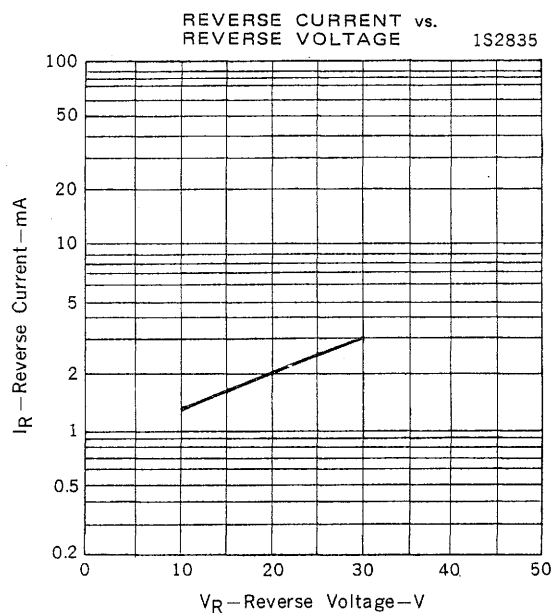
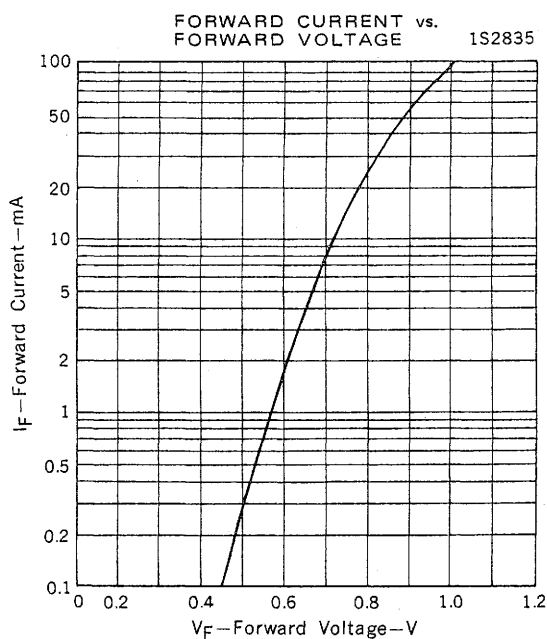
\* Both diodes loaded simultaneously.

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

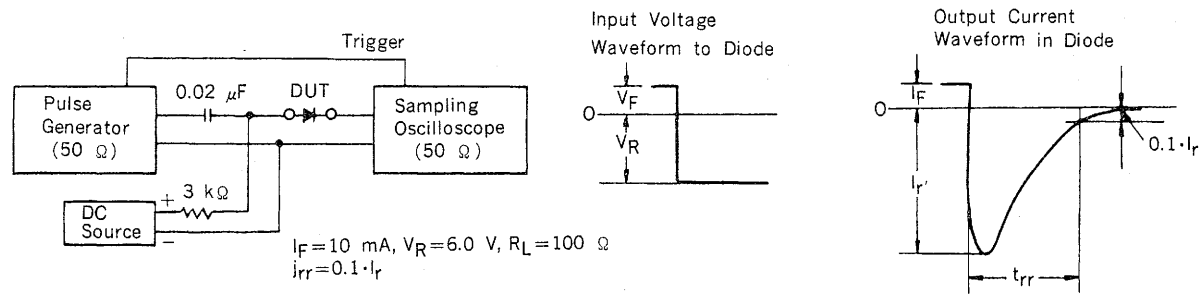
CHARACTERISTIC	SYMBOL	1S2835 (A3)			1S2836 (A4)			UNIT	TEST CONDITIONS
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
Forward Voltage	$V_{F1}$		0.72	1.0		0.72	1.0	V	$I_F = 10$ mA
	$V_{F2}$		0.88	1.1		0.88	1.1	V	$I_F = 50$ mA
	$V_{F3}$		1.0	1.2		1.0	1.2	V	$I_F = 100$ mA
Reverse Current	$I_R$			0.1				$\mu\text{A}$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

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TYPICAL ELECTRICAL CURVES ( $T_a = 25^\circ\text{C}$ )



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



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