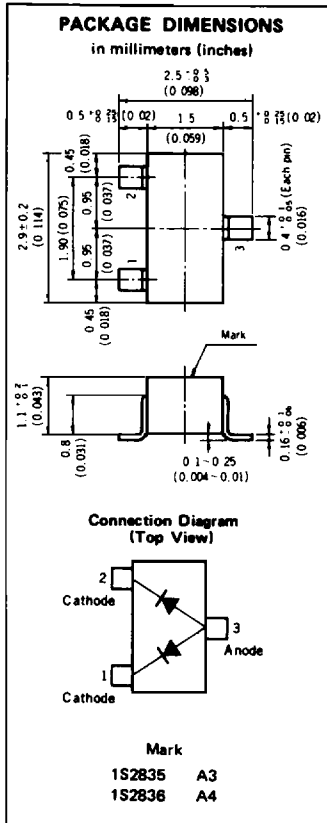


1S2835, 1S2836

High Speed Switching Silicon Epitaxial Double Diodes : Common Anode



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

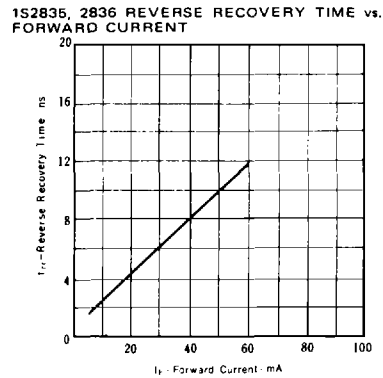
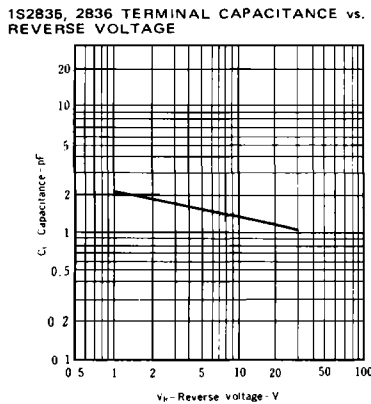
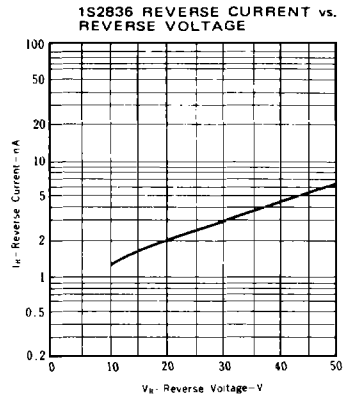
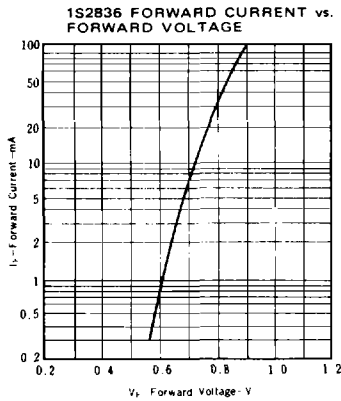
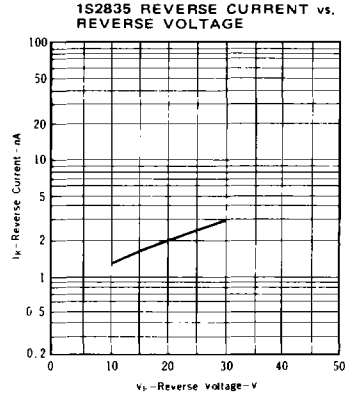
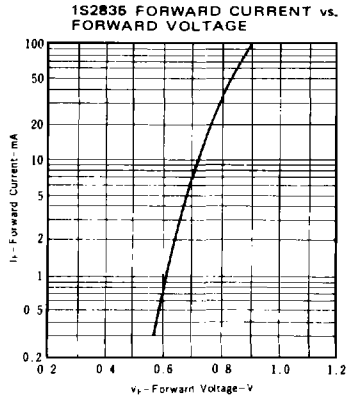
* Both diodes loaded simultaneously.

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}		0.83	1.0		0.83	1.0	V	$I_F = 50\text{mA}$
	V_{F3}		0.9	1.2		0.9	1.2	V	$I_F = 100\text{mA}$
Reverse Current	I_R			0.1				μA	$V_R = 30\text{V}$
	I_R						0.1	μA	$V_R = 50\text{V}$
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.

1S2835, 1S2836

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



t_{rr} REVERSE RECOVERY TIME TEST CIRCUIT

