

# Switching diode

## RLS4148 / RLS4150 / RLS4448

\*This product is available only outside of Japan.

### ●Applications

High-speed switching

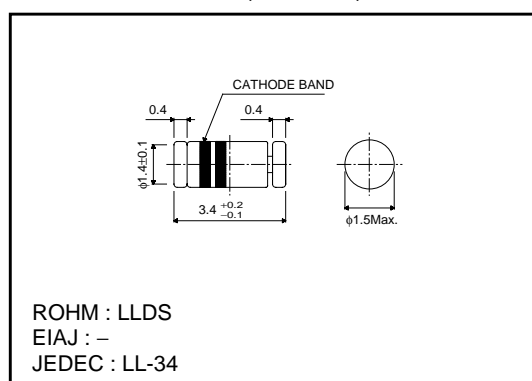
### ●Features

- 1) Small surface mounting type. (LLDS)
- 2) High speed.
- 3) For surface mounting.
- 4) High reliability.

### ●Construction

Silicon epitaxial planar

### ●External dimensions (Units : mm)



### ●Absolute maximum ratings (Ta = 25°C)

Type	V <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>FM</sub> (mA)	I <sub>O</sub> (mA)	I <sub>F</sub> (mA)	I <sub>FSM</sub> 1μs (A)	P (mW)	T <sub>j</sub> (°C)	T <sub>opr</sub> (°C)	T <sub>stg</sub> (°C)
RLS4148	100	75	450	150	200	2	500	200	-65~+200	-65~+200
RLS4150	50	50	600	200	250	4	500	200	-65~+200	-65~+200
RLS4448	100	75	450	150	200	2	500	200	-65~+200	-65~+200

### ●Electrical characteristics (Ta = 25°C)

Type	V <sub>F</sub> (V)						B <sub>v</sub> (V)Min.		I <sub>R</sub> (μA)Max.				Cr (pF) V <sub>R</sub> =0 f=1MHz	t <sub>rr</sub> (ns) V <sub>R</sub> =6V I <sub>F</sub> =10mA R <sub>L</sub> =100Ω
	@ 1mA		@ 5mA		@ 10mA		@ 5μA	@ 100μA	@ 25°C		@ 150°C			
									V <sub>R</sub> (V)	V <sub>R</sub> (V)	V <sub>R</sub> (V)	V <sub>R</sub> (V)		
RLS4148	/	/	1.0	/	/	/	75	100	0.025	20	50.0	20	4	4
RLS4150	0.54	/	0.66	0.76	0.82	0.87	-	50	0.1	50	100.0	50	2.5	4
	0.62	/	0.74	0.86	0.92	1.0								
RLS4448	/	0.62	/	/	/	/	-	100	0.025	20	50.0	20	4	4
	/	0.72	/	/	/	1.0								

The upper figure is the minimum V<sub>F</sub> and the lower figure is the maximum V<sub>F</sub> value.

Diodes

●Electrical characteristic curves (Ta = 25°C)

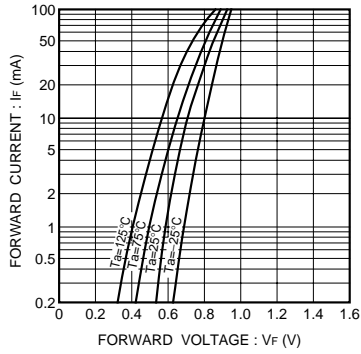


Fig.1 Forward characteristics

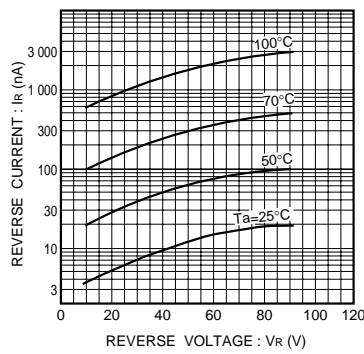


Fig.2 Reverse characteristics

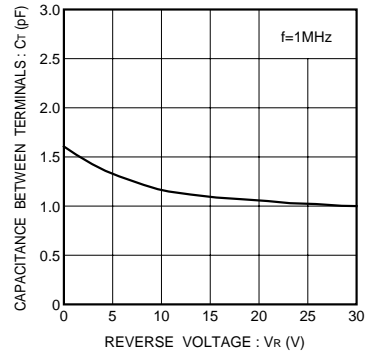


Fig.3 Capacitance between terminals characteristics

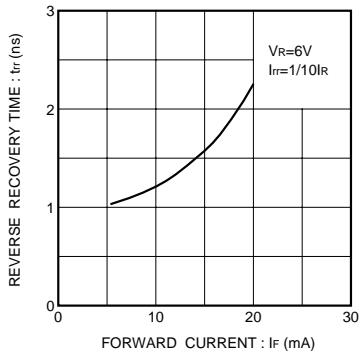


Fig.4 Reverse recovery time characteristics

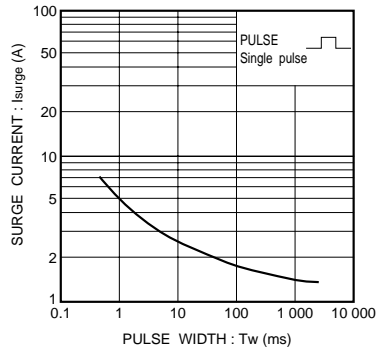


Fig.5 Surge current characteristics

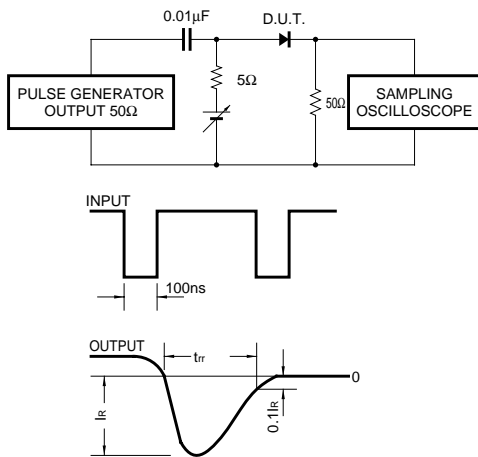


Fig.6 Reverse recovery time ( $t_{rr}$ ) measurement circuit