

Switching diode

RLS4148 / RLS4150 / RLS4448

*This product is available only outside of Japan.

●Applications

High-speed switching

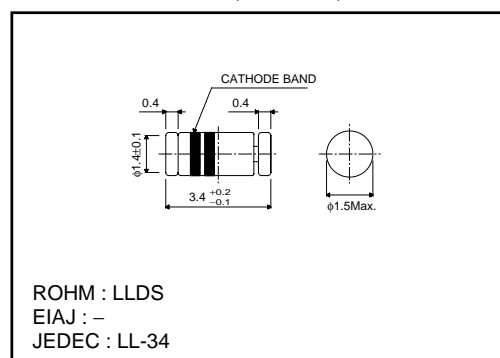
●Features

- 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 _{RM} (V)	V _R (V)	I _{FM} (mA)	I _o (mA)	I _F (mA)	I _{FSM} 1μs (A)	P (mW)	T _j (°C)	Topr (°C)	Tstg (°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 _F (V)						B _V (V)Min.		I _r (μA)Max.				Cr (pF) V _R =0 f=1MHz	t _{rr} (ns) V _R =6V I _F =10mA R _L =100Ω
	@	@	@	@	@	@	@	@	@25°C		@150°C			
	1mA	5mA	10mA	50mA	100mA	200mA	5μA	100μA	V _R (V)		V _R (V)			
RLS4148			1.0				75	100	0.025 5.0	20 75	50.0	20	4	4
RLS4150	0.54 0.62		0.66 0.74	0.76 0.86	0.82 0.92	0.87 1.0	–	50	0.1 5.0	50 75	100.0	50	2.5	4
RLS4448		0.62 0.72					–	100	0.025 5.0	20 75	50.0	20	4	4

The upper figure is the minimum V_F and the lower figure is the maximum V_F value.

Diodes

● Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

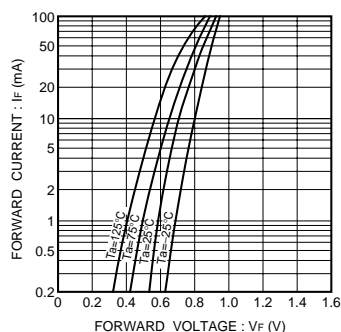


Fig.1 Forward characteristics

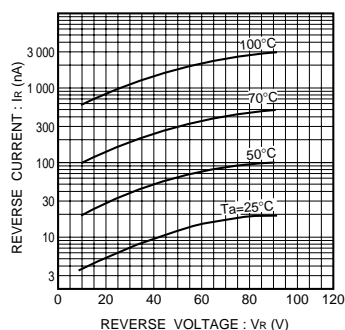


Fig.2 Reverse characteristics

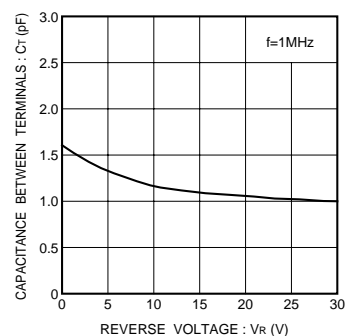


Fig.3 Capacitance between terminals characteristics

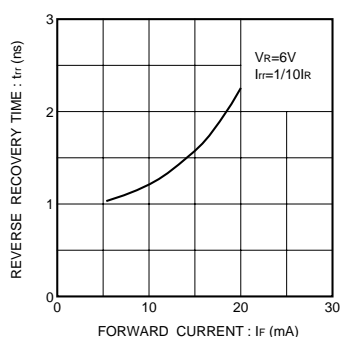


Fig.4 Reverse recovery time characteristics

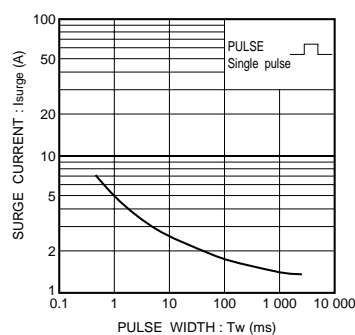


Fig.5 Surge current characteristics

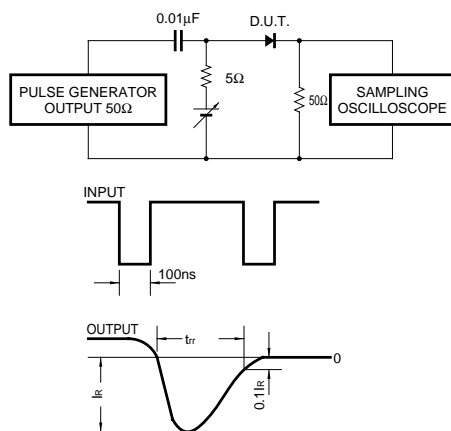


Fig.6 Reverse recovery time (t_r) measurement circuit

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