

High-speed switching diode

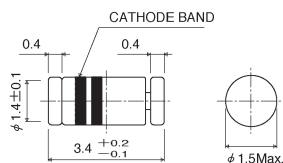
RLS4148 / RLS4150 / RLS4448

*This product is available only outside of Japan.

●JEDEC Standard Product

The following RLS series diodes are available to support the JEDEC standard.

●External dimensions (Units: mm)



ROHM : LLDS
JEDEC : LL-34, SOD-80

●Absolute maximum ratings (Ta = 25°C)

Type	V _{RM} (V)	V _R (V)	I _{FM} (mA)	I _o (mA)	I _F (mA)	I _{FSM} 1 μs (A)	P (mW)	T _j (°C)	T _{opr} (°C)	T _{stg} (°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)	t _{rr} (ns) V _R =6V I _F =10mA R _L =100Ω
	@	@	@	@	@	@	@	@	@25°C		@150°C		V _R =0 f=1MHz	
	1mA	5mA	10mA	50mA	100mA	200mA	5 μA	100 μA	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				1.0	—	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.

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

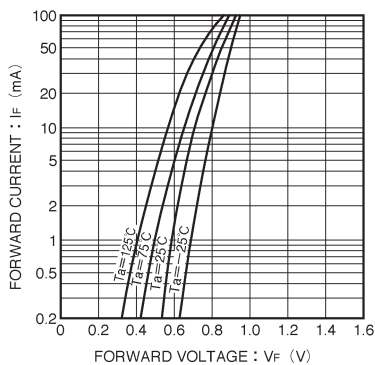


Fig. 1 Forward characteristics

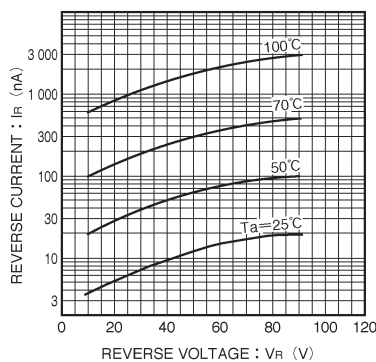


Fig. 2 Reverse characteristics

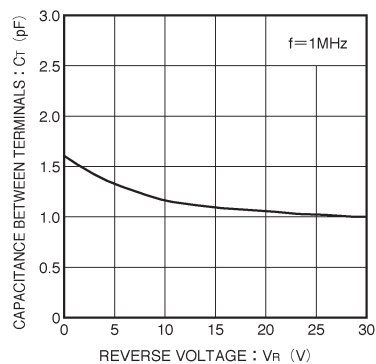


Fig. 3 Capacitance between terminals characteristics

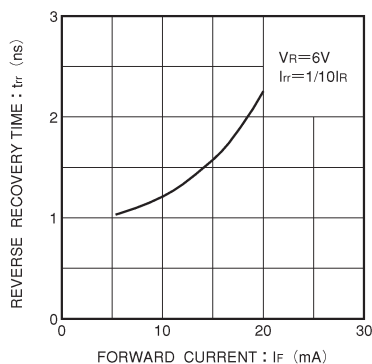


Fig. 4 Reverse recovery time characteristics

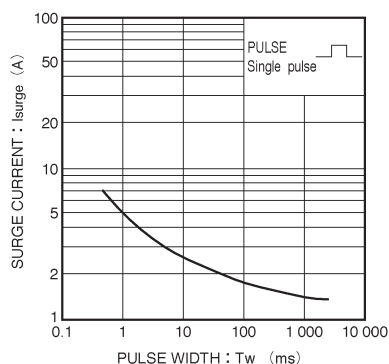
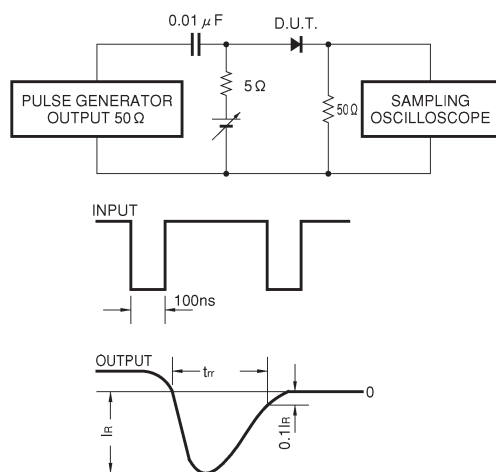


Fig. 5 Surge current characteristics

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