

High-voltage switching diode

RLS245

●Applications

High voltage switching
General purpose rectification

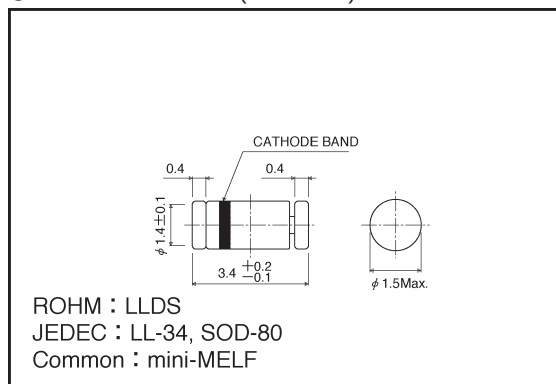
●Features

- 1) High reliability.
- 2) Small surface mounting type. (LLDS)
- 3) $V_{RM} = 250V$ guaranteed.

●Construction

Silicon epitaxial planar

●External dimensions (Units: mm)



●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	250	V
DC reverse voltage	V_R	220	V
Peak forward current	I_{FM}	625	mA
Mean rectifying current	I_o	200	mA
Surge current (1s)	I_{surge}	1000	mA
Power dissipation	P	300	mW
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature	T_{stg}	$-65 \sim +175$	$^\circ\text{C}$

Type	Color
RLS245	White

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	—	1.13	1.5	V	$I_F = 200\text{mA}$
Reverse current	I_R	—	0.05	10	μA	$V_R = 220\text{V}$
Capacitance between terminals	C_T	—	0.95	3	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$
Reverse recovery time	t_{rr}	—	—	75	ns	$I_F = 20\text{mA}$, $I_R = 20\text{mA}$, $R_L = 50\ \Omega$

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

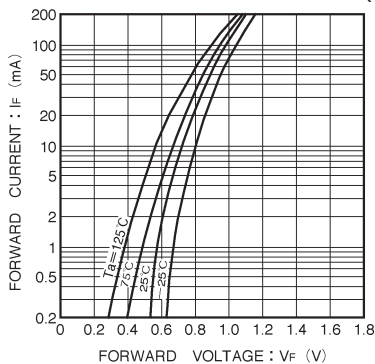


Fig. 1 Forward characteristics

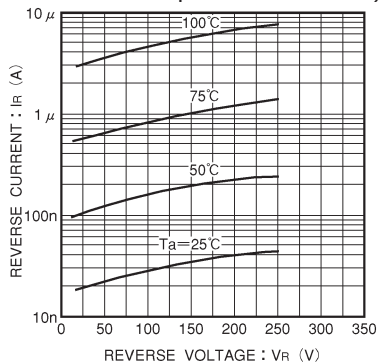


Fig. 2 Reverse characteristics

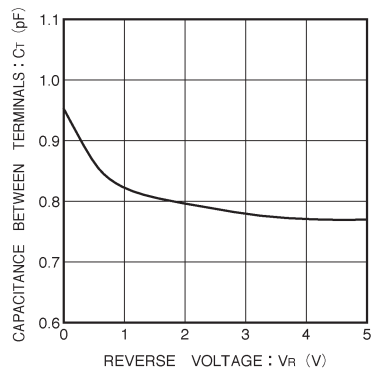


Fig. 3 Capacitance between terminals characteristics

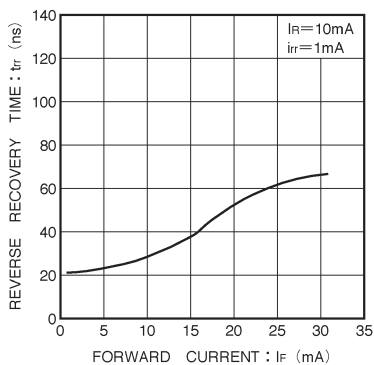


Fig. 4 Reverse recovery time characteristics

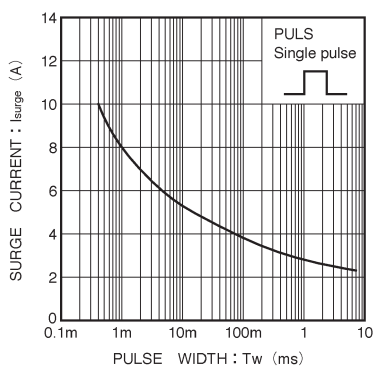


Fig. 5 Surge current characteristics

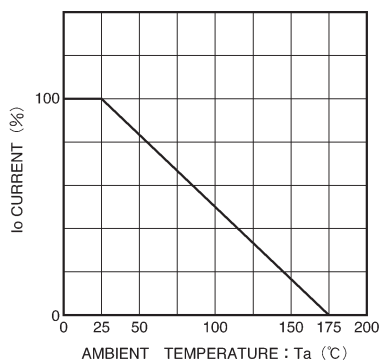
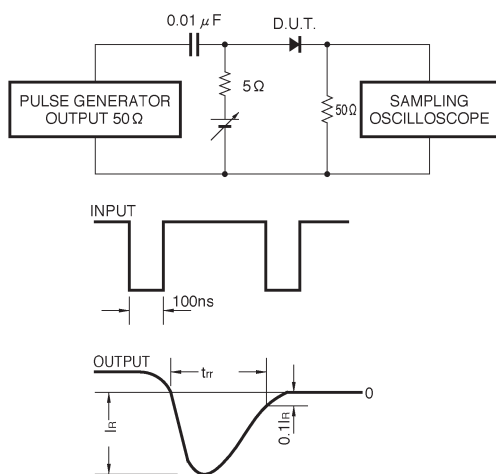


Fig. 6 Derating curve (mounting on glass epoxy PCBs)

Fig. 7 Reverse recovery time (t_{rr}) measurement circuit