Low-leakage Switching Diode

RLS139

●Applications

High speed switching

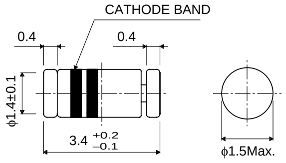
●Features

1) High reliability.
2) Small surface areas mounting type. (LLDS (LL-34))
3) The typical reverse current is extrermely low of 0.45nA.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



ROHM : LLDS
JEDEC : LL-34
Common : mini-MELF

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	400	mA
Mean rectifying current	I_O	130	mA
Surge current (1ms)	I_{surge}	600	mA
Power dissipation	P	300	mW
Junction temperature	T_j	175	˚C
Storage temperature	T_{stg}	−65~+175	˚C

●Cathode band colors

Type	1st Color Band	2nd Color Band
RLS139	Gray	Gray

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	1.0	1.2	V	I_F=100mA
Reverse current	I_R	-	0.45	20	nA	V_R=30V
Capacitance between terminals	C_T	-	2	5	pF	V_R=0.5V, f=1MHz
Reverse recovery time	t_{rr}	-	30	50	ns	V_R=6V, I_F =10mA, R_L =50Ω

●Electrical characteristics curves (Ta=25°C)

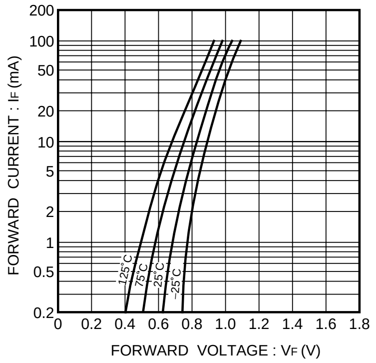


Fig. 1 Forward characteristics

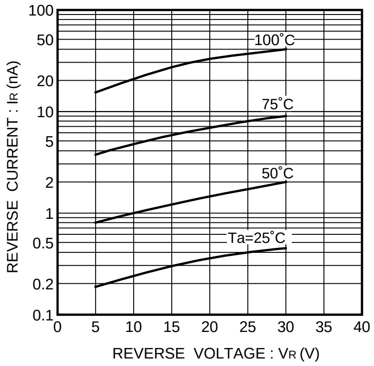


Fig. 2 Reverse characteristics

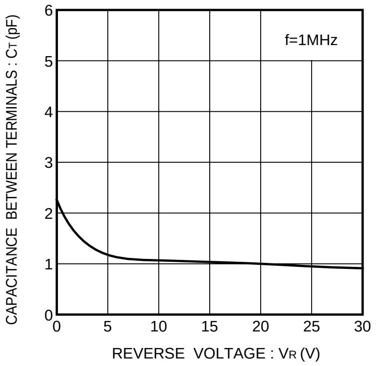


Fig. 3 Capacitance between terminals characteristics

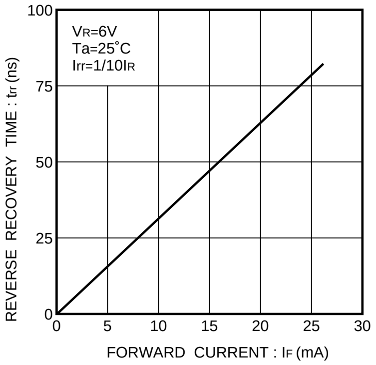


Fig. 4 Reverse recovery time characteristics

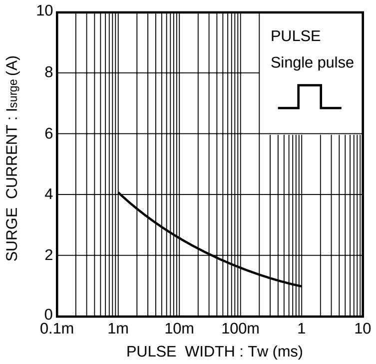


Fig.5 Surge current characteristics

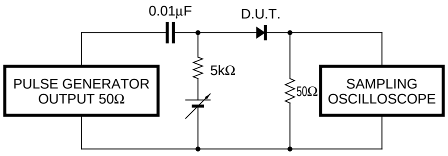


Fig. 6 Reverse recovery time (t_{rr}) measurement circuit