Diodes

Switching diode

1N4531 / 1N4148 / 1N4150 / 1N4448

∗This product is available only outside of Japan.

●Application

High-speed switching

●Features

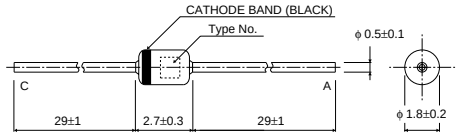
1) Glass sealed envelope. (MSD, GSD)
2) High speed.
3) High reliability.

●Construction

Silicon epitaxial planar

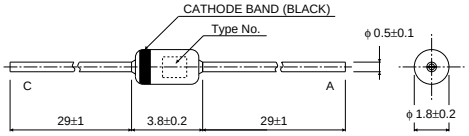
●External dimensions (Units : mm)

1N4531



ROHM : MSD
EIAJ : –
JEDEC : DO-34

1N4148 / 1N4150 / 1N4448



ROHM : GSD
EIAJ : –
JEDEC : DO-35

●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)	Tj (°C)	Topr (°C)	Tstg (°C)
1N4531	100	75	450	150	200	2	500	200	–65~+200	–65~+200
1N4148	100	75	450	150	200	2	500	200	–65~+200	–65~+200
1N4150	50	50	600	200	250	4	500	200	–65~+200	–65~+200
1N4448	100	75	450	150	200	2	500	200	–65~+200	–65~+200

●Electrical characteristics (Ta = 25°C)

Type	V_F (V) @0.1mA	@0.25mA	@1mA	@2mA	@5mA	@10mA	@20mA	@30mA	@50mA	@100mA	@200mA	@250mA	BV (V) Min. @5μA	@100μA	I_R (μA) Max. @25°C	V_R (V)	@150°C	V_R (V)	C_t (pF) V_R=0 f=1MHz	t_{rr} (ns) V_R=6V I_F=10mA R_L=100Ω
1N4531						1.0							75	100	0.025	20	50.0	20	4	4
															5.0	75				
1N4148						1.0							75	100	0.025	20	50.0	20	4	4
															5.0	75				
1N4150			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									
1N4448					0.62								–	100	0.025	20	50.0	20	4	4
					0.72					1.0					5.0	75				

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

ROHM

●**Electrical characteristic curves** (Ta = 25°C)

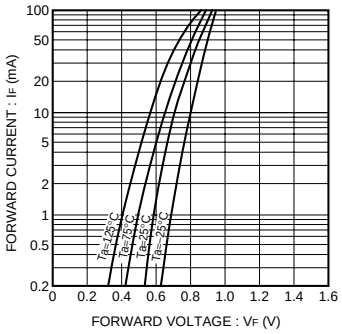


Fig. 1 Forward characteristics

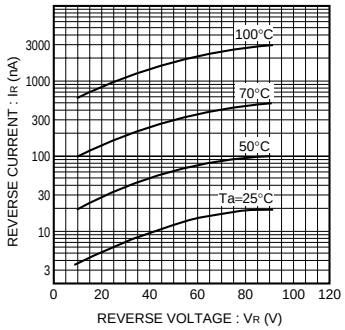


Fig. 2 Reverse characteristics

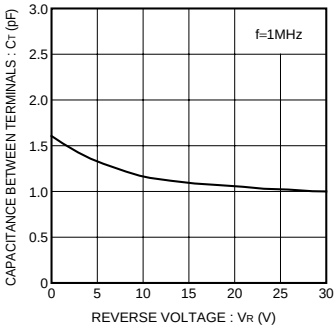


Fig. 3 Capacitance between terminals characteristics

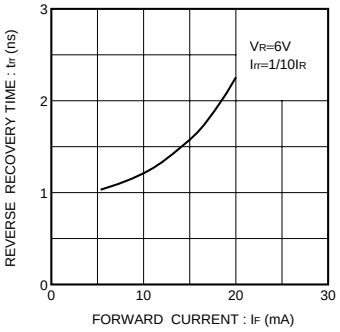


Fig. 4 Reverse recovery time characteristics

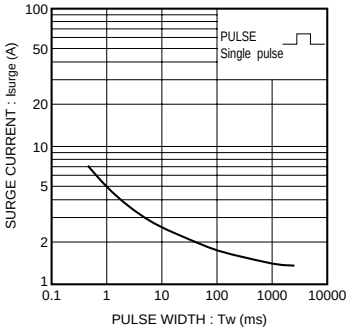


Fig. 5 Surge current characteristics

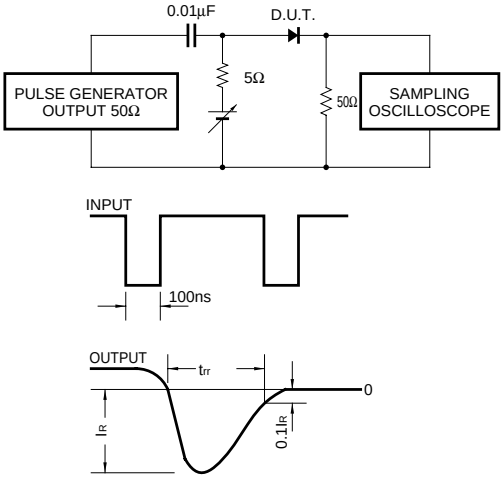


Fig. 6 Reverse recovery time (t_{rr}) measurement circuit

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