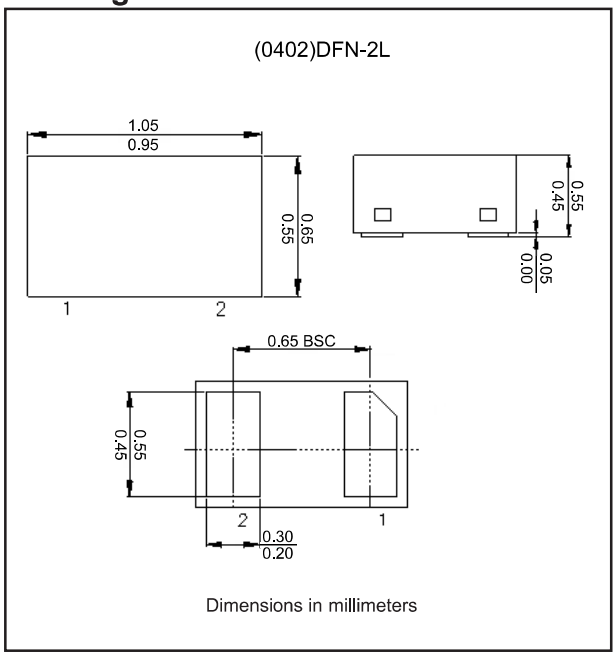
1N4448D1

200 mW Surface Mount Switching Diode-100V

Features

- Fast Switching Device (trr<4.0 ns)
- General Purpose Diodes
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Lead-free parts for green partner, exceeds environmental standards of MIL-STD-19500 /228

Package Outline



Mechanical data

- Epoxy:UL94-VO rated flame retardant
- Case : Molded plastic, (0402)DFN-2L
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Maximum ratings and Electrical characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	Symbol	Value	UNIT
Maximum reverse voltage	V_R	75	V
Maximum peak reverse voltage	V_{RM}	100	V
Maximum RMS voltage	V_{RMS}	50	V
Maximum DC blocking voltage	V_{DC}	75	V
Maximum average forward current at T_A = 25°C	I_O	100	mA
Maximum peak forward surge current, 1.0us	I_{FSM}	2	A
Maximum power dissipation derate above 25°C	P_D	200	mW
Maximum forward voltage	V_F	0.720@0.001A 0.855@0.01A 1.0@0.05A 1.25@0.15A	V
Maximum DC reverse current at rated DC blocking voltage T_J = 25°C	I_R	0.025@20V 2.5@75V	uA
Typical junction capacitance (Notes 1)	C_J	1.5	pF
Maximum reverse recovery time (Notes 2)	t_{rr}	4.0	ns
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Notes :
1. C_J at V_R = 0V, f = 1MHZ
2. From I_F = 10mA to I_R = 1mA, V_R = 6V, R_L = 100ohm

Rating and characteristic curves

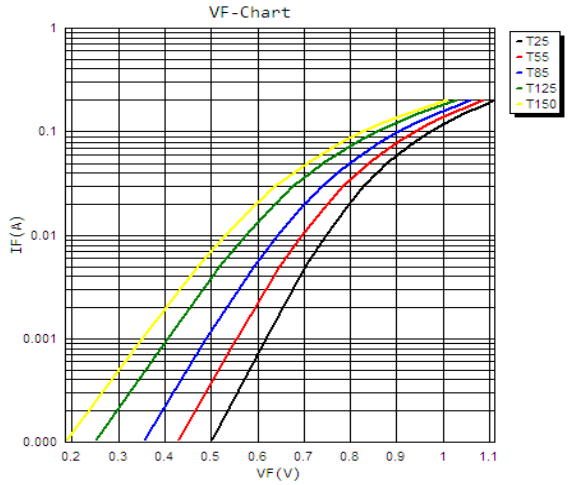


Fig.1 Forward current(IF) vs Forward voltage(VF)

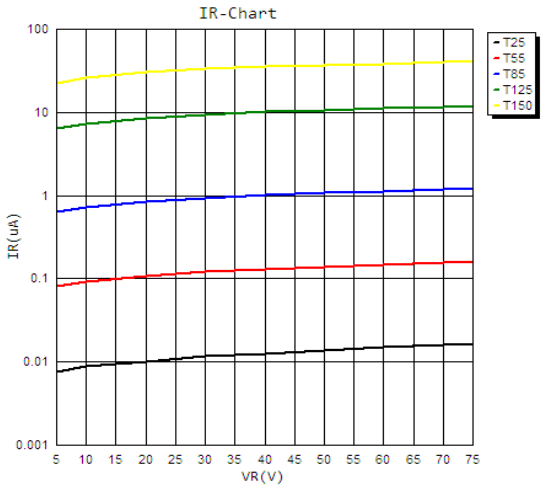


Fig.2 Reverse current(IR) vs Reverse voltage(VR)

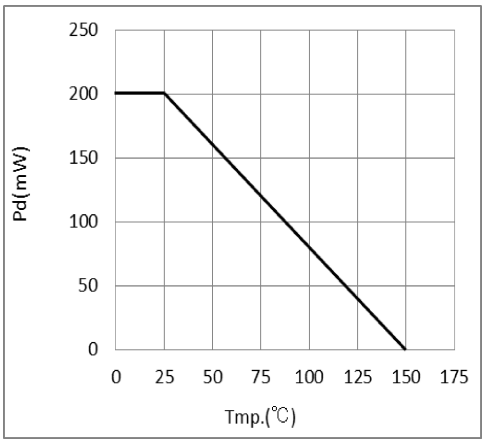


Fig.3 Power Derating Curve

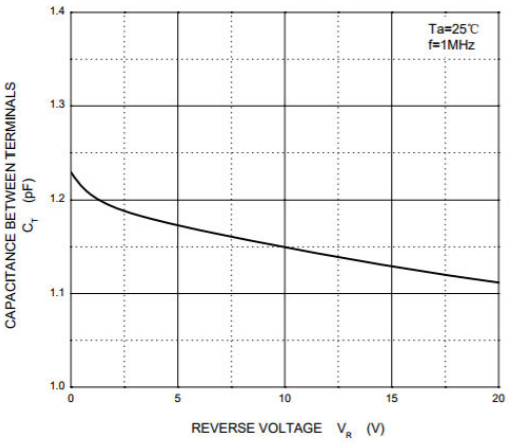


Fig.4 Capacitance vs Reverse voltage(VR)

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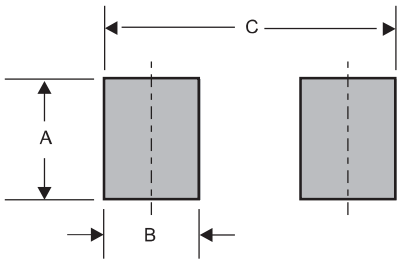
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
1N4448D1	D

Suggested solder pad layout



Dimensions in millimeters

PACKAGE	A	B	C
(0402)DFN-2L	0.60	0.35	1.00