

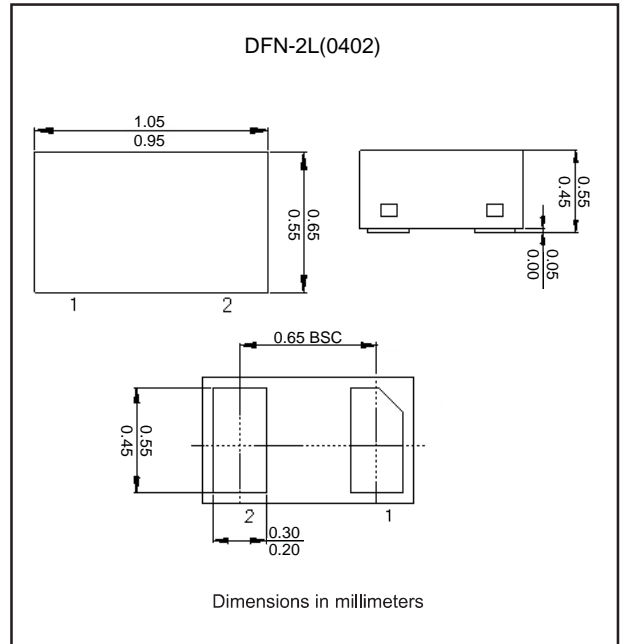
Features

- Fast Switching Device ($t_{rr} < 4.0$ 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
- Compliant to Halogen-free

Mechanical data

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

Package Outline



Maximum ratings and Electrical characteristics (AT $T_A = 25^\circ\text{C}$ 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 $T_A = 25^\circ\text{C}$	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 $T_j = 25^\circ\text{C}$	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	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

Notes :

1. C_J at $V_R = 0V$, $f = 1\text{MHz}$
2. From $I_F = 10\text{mA}$ to $I_R = 1\text{mA}$, $V_R = 6V$, $R_L = 100\text{ohm}$

Rating and characteristic curves

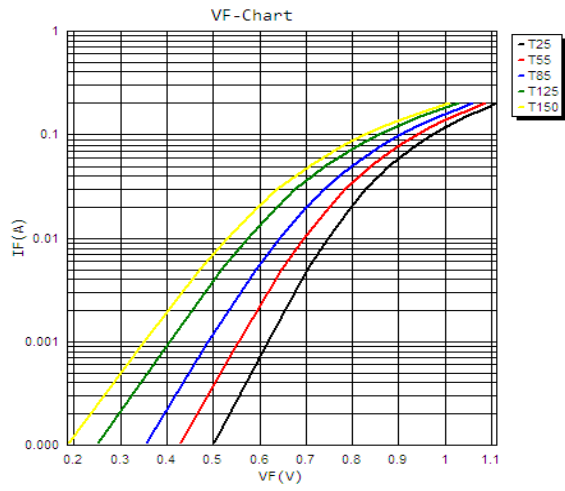


Fig.1 Forward current(IF) vs Forward voltage(VF)

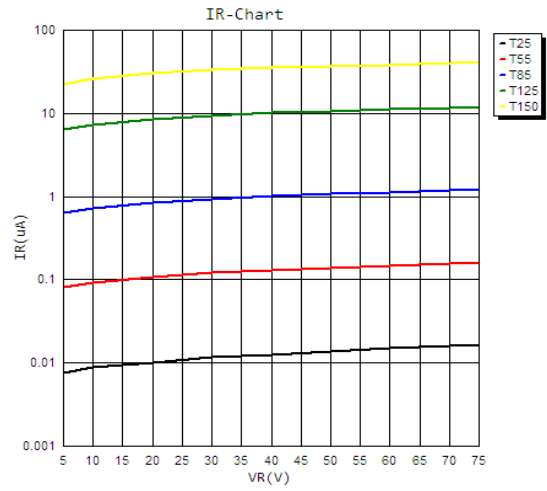


Fig.2 Reverse current(IR) vs Reverse voltage(VR)

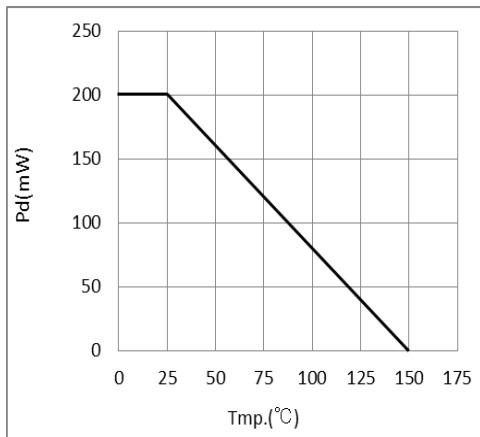


Fig.3 Power Derating Curve

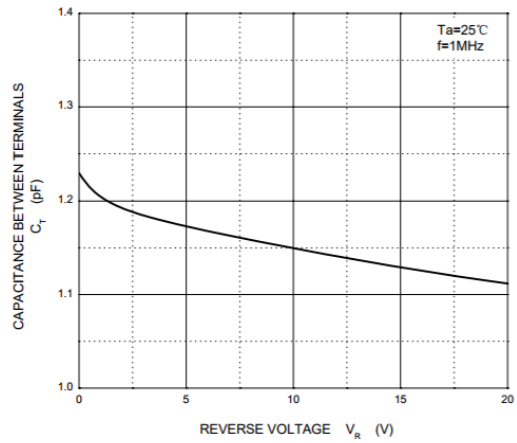




Fig.4 Capacitance vs Reverse voltage(VR)



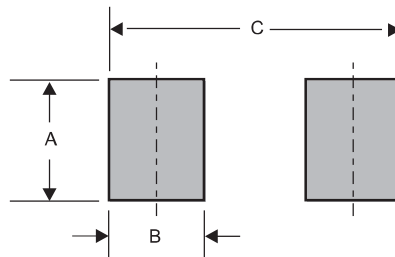
Pinning information

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
DFN-2L(0402)	0.60	0.35	1.00