

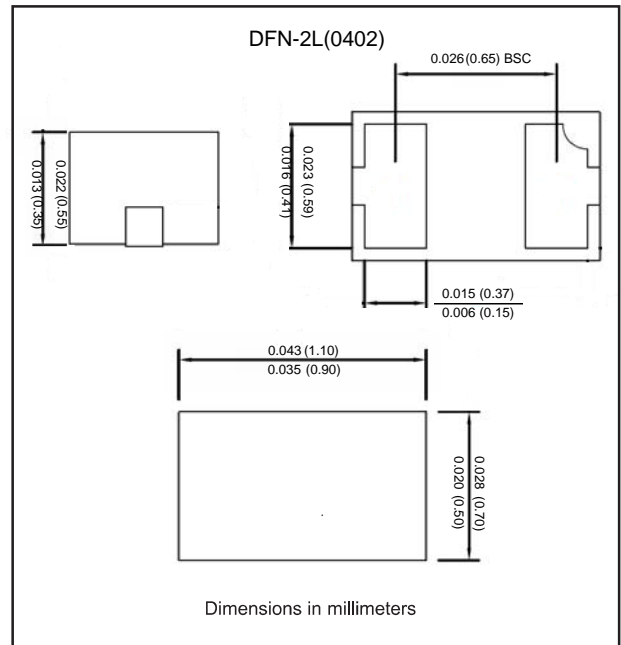
### Features

- Low Leakage Current Applications
- For General Purpose Switching Applications
- High Conductance
- Reverse voltage: 100V
- Small package saves board space
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

### Mechanical data

- **Package:** DFN-2L (0402)
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### Package outline



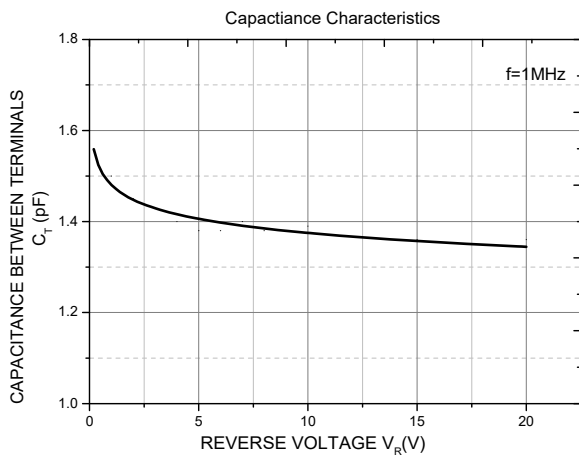
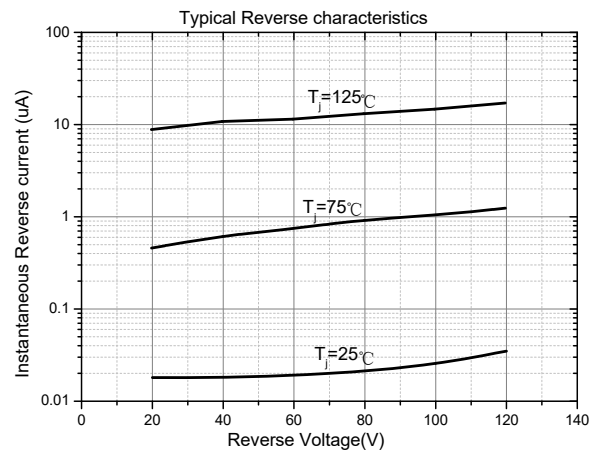
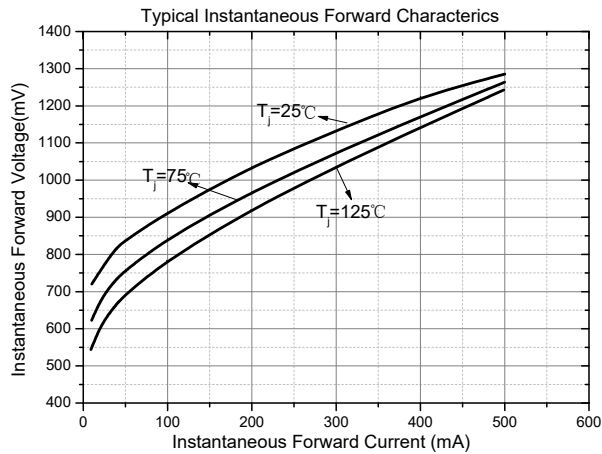
### Maximum ratings (AT $T_a = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		100
Reverse voltage	$V_R$	V		100
Non-repetitive Peak forward surge current	$I_{FSM}$	A	Pulse width=1 us Pulse width=1 s	2 0.5
Repetitive peak forward current	$I_{FRM}$	mA		300
Average forward current	$I_{FAV}$	mA		150
Power dissipation	$P_D$	mW		100
Junction temperature	$T_j$	$^\circ\text{C}$		-55 ~+150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55 ~+150

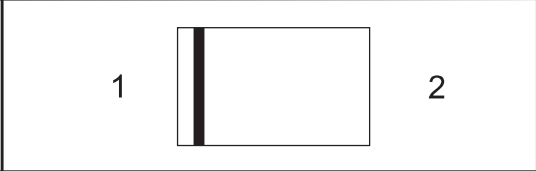
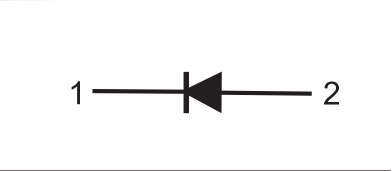
### Electrical characteristics (AT $T_a = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu\text{A}$	100	
Forward Voltage	$V_F$	V	$I_F=1\text{mA}$		0.715
			$I_F=10\text{mA}$		0.855
			$I_F=50\text{mA}$		1.00
			$I_F=150\text{mA}$		1.25
Reverse Leakage Current	$I_{R1}$	nA	$V_R=25\text{V}$		30
	$I_{R2}$	$\mu\text{A}$	$V_R=75\text{V}$		1
Capacitance	C	pF	$V_R=0\text{V}, f=1\text{MHz}$		4
Reverse Recovery Time	$T_{RR}$	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$		4

### Characteristics (Typical)



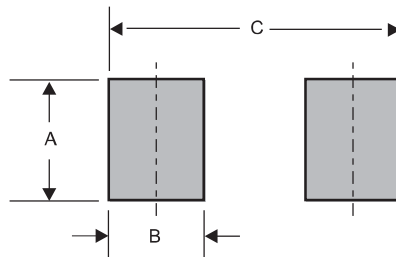
## Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

## Marking

Type number	Marking code
1N4148D1-Q1	T4

## Suggested solder pad layout



Dimensions in millimeters

PACKAGE	A	B	C
DFN-2L(0402)	0.024(0.60)	0.014(0.35)	0.039(1.00)