

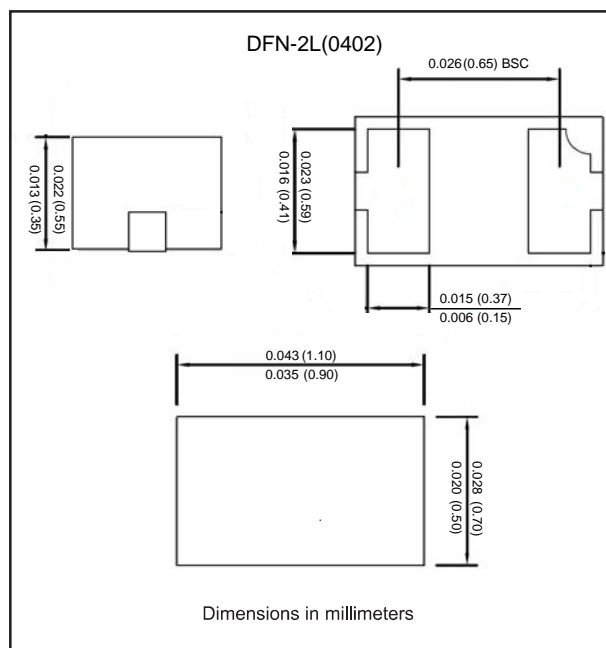
Features

- Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Conductance
- Lead Free Finish/RoHS Compliant
- 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)

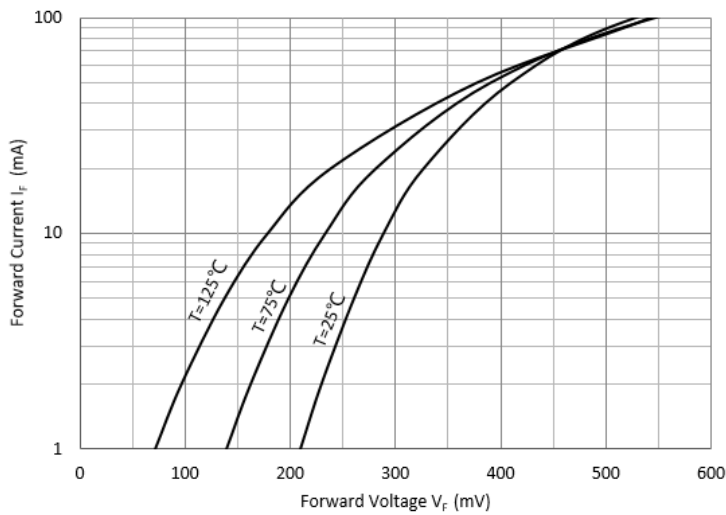
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Reverse voltage	V_R	V		30
Non-repetitive Peak forward surge current	I_{FSM}	A	$t_p=8.3\text{ms}$, half sine	1
Average forward current	I_{FAV}	mA		100
Power dissipation	P_D	mW		100
Junction temperature	T_j	$^\circ\text{C}$		-65 ~ +125
Storage temperature range	T_{stg}	$^\circ\text{C}$		-65 ~ +125

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

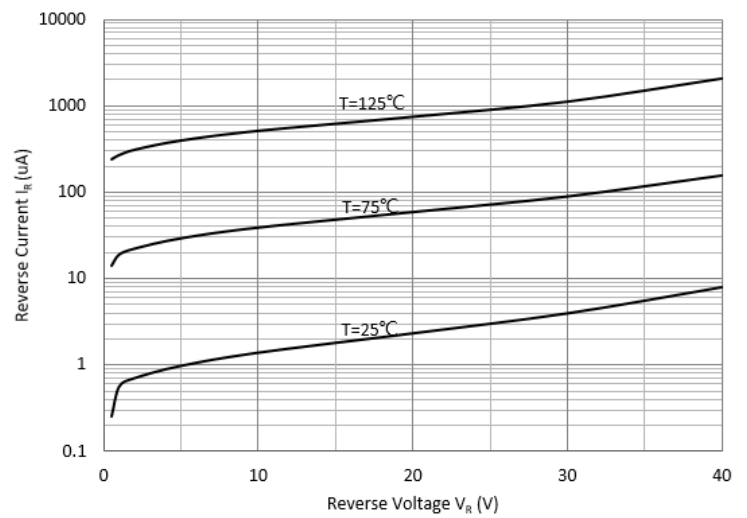
PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V_R	V	$I_R=30\mu\text{A}$	30	
Forward Voltage	V_F	V	$I_F=10\text{mA}$		0.35
Reverse Leakage Current	I_R	μA	$V_R=10\text{V}$		10

Characteristics (Typical)

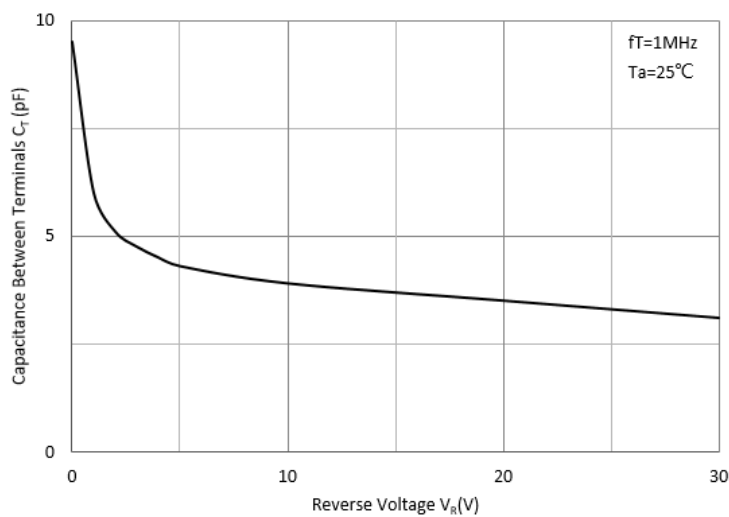
Forward Characteristics



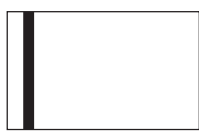

Reverse Characteristics



Capacitance Characteristics



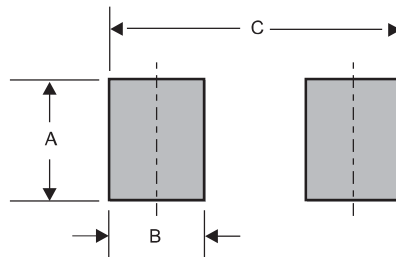
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
RB521D1-30-Q1	SB

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)