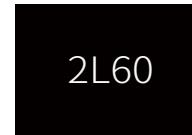


FEATURES

- | Low Forward Voltage Drop
- | Extremely Small DFN2020-3L Package
- | Surface Device Type Mounting
- | Green EMC
- | Band Indicates Cathode



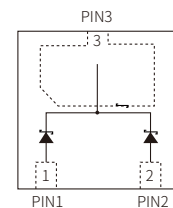
DFN2020-3L



Marking

APPLICATION

- | Low voltage rectification
- | Reverse polarity protection
- | Low power consumption applications



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Maximum repetitive reverse voltage	V_{RRM}	60	V
Maximum DC blocking reverse voltage	V_R	60	V
Average Forward Current	$I_{F(AV)}$	2	A
Peak Forward Surge Current (At 8.3ms single half sine-wave)	I_{FSM}	60	A
Junction Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=2\text{A}$			0.59	V
Reverse Leakage Current	I_R	$V_R=60\text{V}, T_a=25^{\circ}\text{C}$			50	μA
Breakdown Voltage	V_{BR}	$I_R=0.1\text{mA}$	60			V
Junction Capacitance	C_J	$V_R=4\text{V}, f=1\text{MHz}$			200	pF

CHARACTERISTIC CURVES

Fig.1 Typical Forward Current Derating Curve

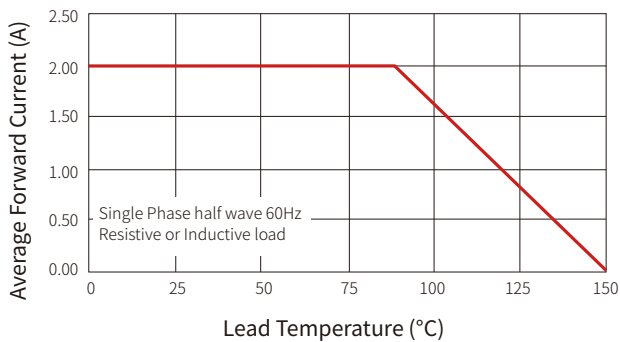


Fig.2 Total Capacitance vs. Reverse Voltage

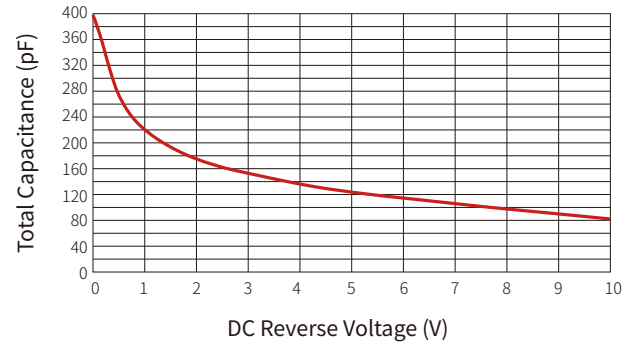


Fig.3 Typical Instantaneous Forward Characteristics

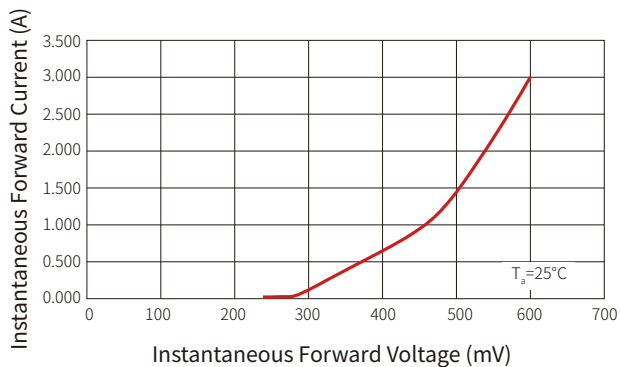


Fig.4 Typical Reverse Characteristics

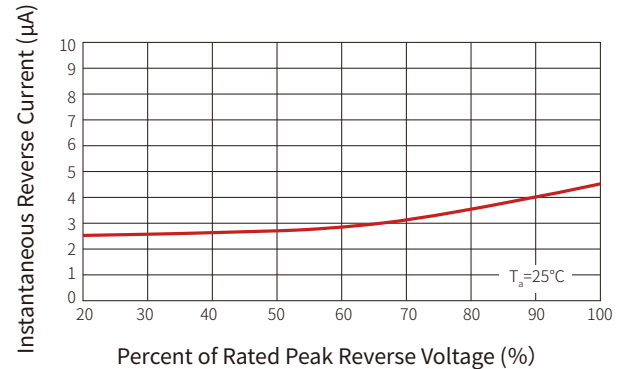
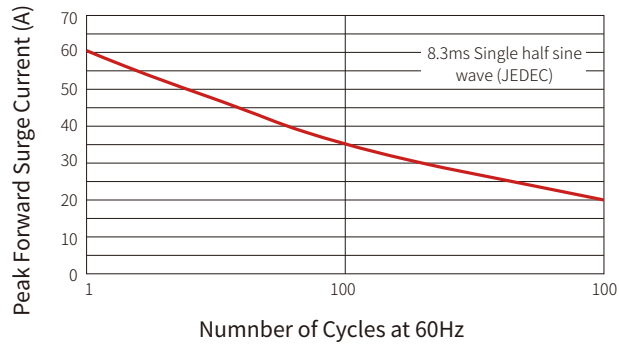
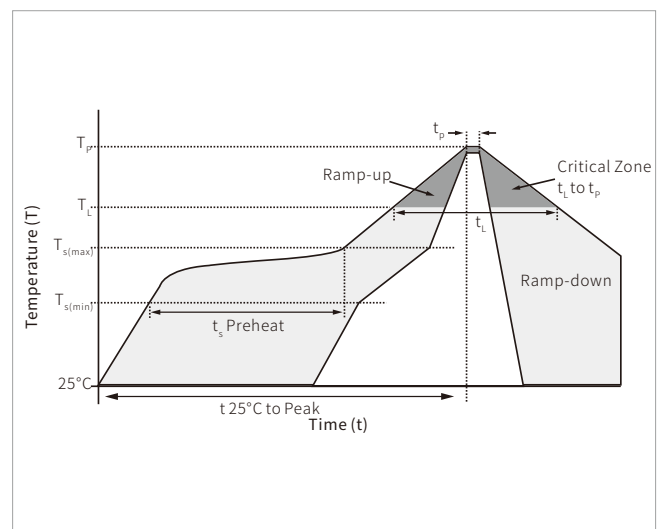


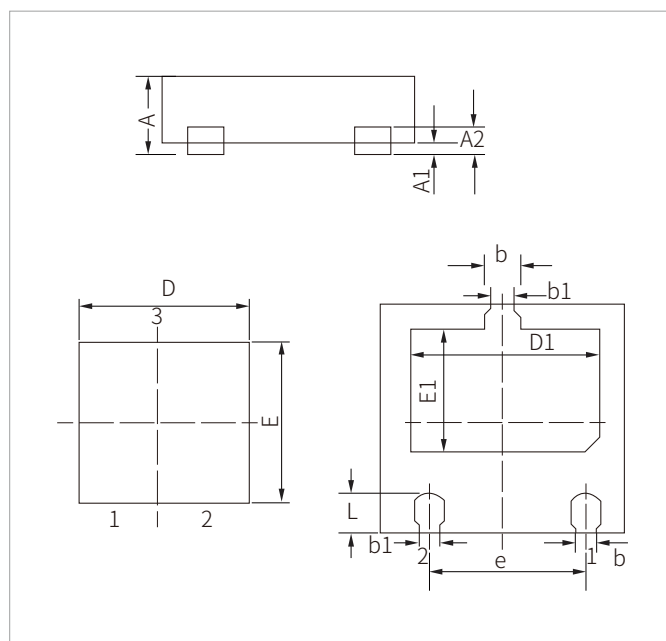
Fig.5 Max. Non-repetitive Forward Surge Current


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

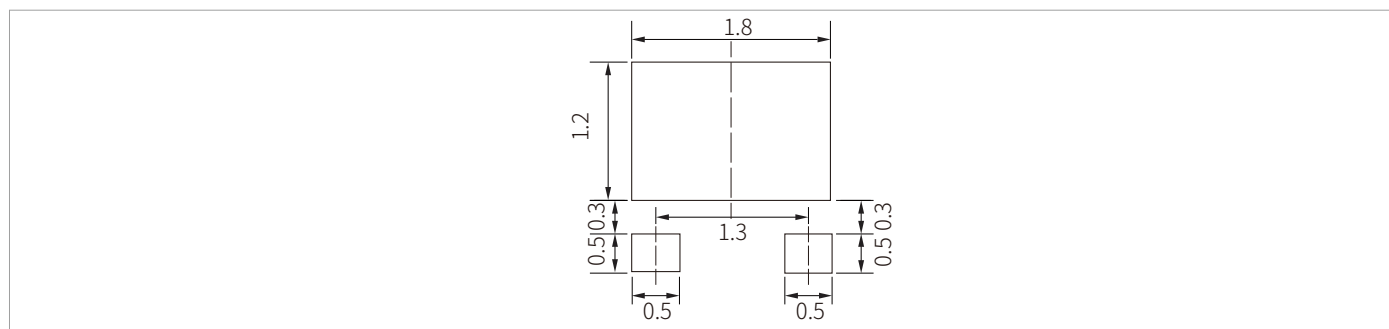


DFN2020-3L PACKAGE INFORMATION



Ref.	Millimeters		
	Min.	Typ.	Max.
A	0.45	0.55	0.65
A1	-	0.00	0.05
A2	0.152BSC		
D	1.80	2.00	2.20
E	1.80	2.00	2.20
b	0.15	0.20	0.25
b1	0.25	0.30	0.35
D1	1.45	1.50	1.55
E1	1.00	1.05	1.10
e	1.30BSC		
L	0.35	0.40	0.45

RECOMMENDED PAD LAYOUT DIMENSIONS



ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
RB20L60HH	DFN2020-3L	3000PCS	7"

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