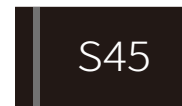


FEATURES

- | Low Forward Voltage Drop
- | Extremely Small DFN1608-2L Package
- | Surface Device Type Mounting
- | Green EMC
- | Band Indicates Cathode
- | Meet AEC-Q101 Requirements



DFN1608



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}	40	V
Maximum DC blocking reverse voltage	V_R	40	V
Average Forward Current	$I_{F(AV)}$	1.5	A
Peak Forward Surge Current (At 8.3ms single half sine-wave)	I_{FSM}	8.5	A
Junction Temperature Range	T_J	-50 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150	$^{\circ}\text{C}$

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

Parameter		Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage	$I_R=100\mu\text{A}$	V_{BR}	40			V
Reverse Leakage Current	$V_R=40\text{V}$	I_R			100	μA
Forward Voltage	$I_F=0.5\text{A}$	V_F			0.45	V
	$I_F=1\text{A}$				0.49	
	$I_F=1.5\text{A}$				0.65	
Junction Capacitance	$V_R=5\text{V}, f=1\text{MHz}$	C_J		85		pF

CHARACTERISTIC CURVES

Fig.1 Typical Forward Current Derating Curve

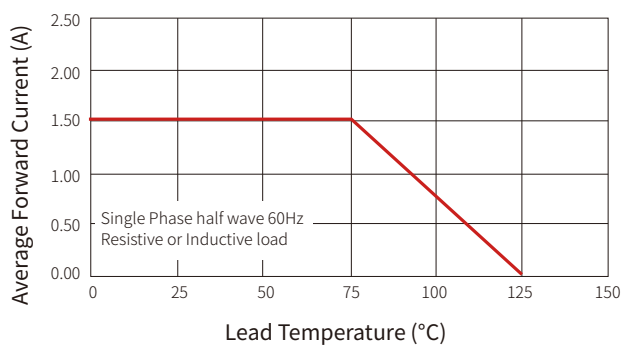


Fig.2 Total Capacitance vs. Reverse Voltage

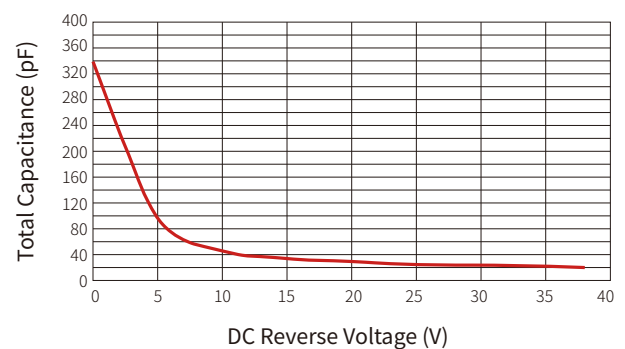
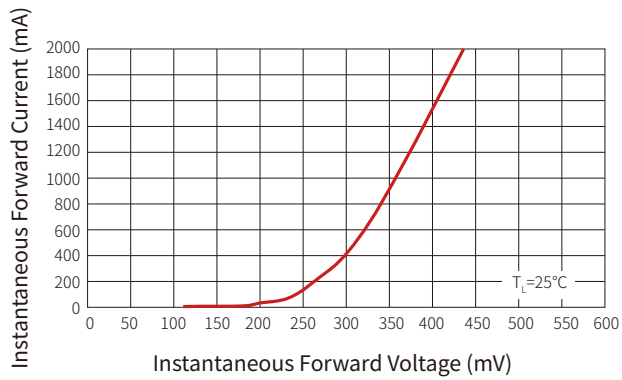
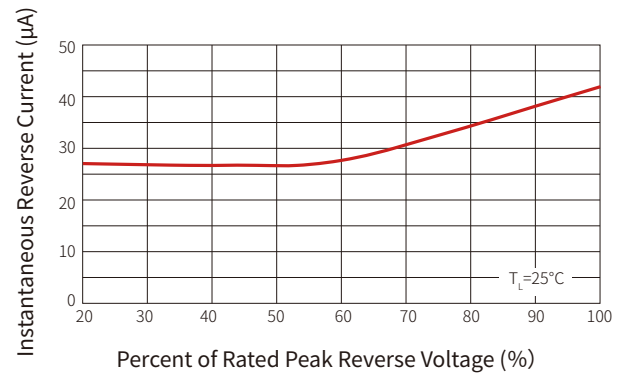
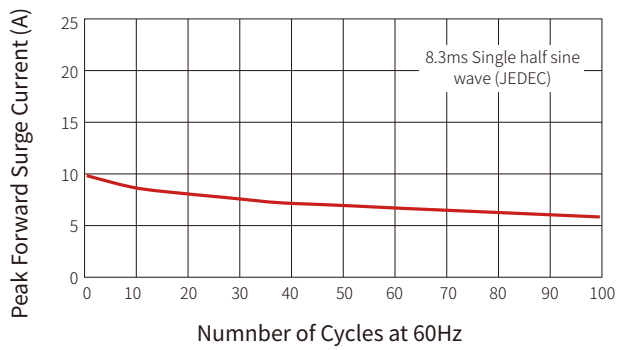
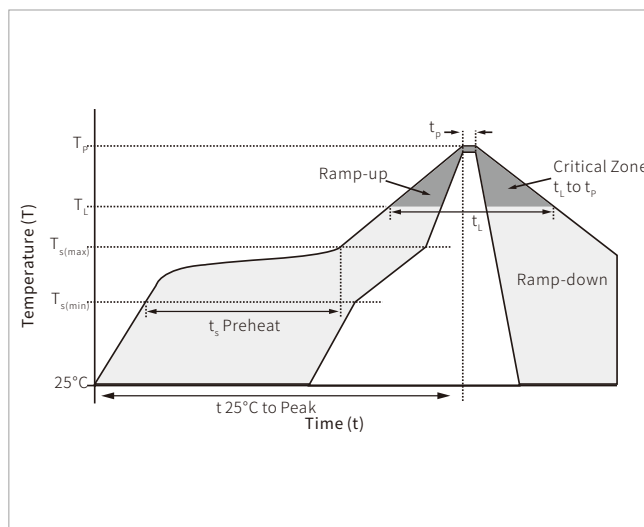


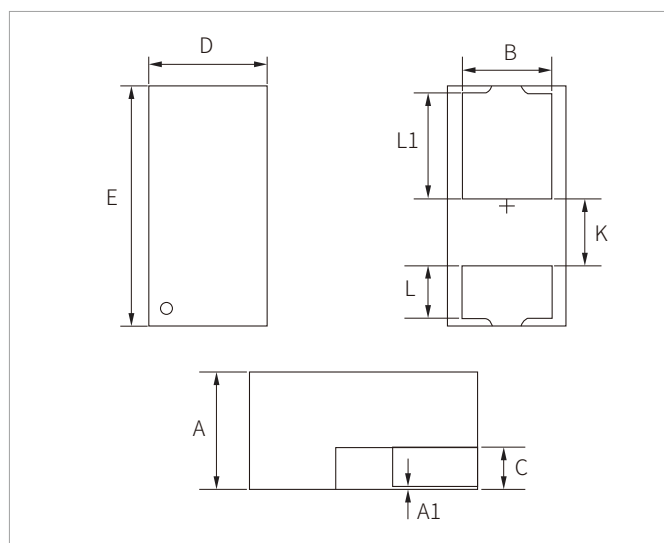
Fig.3 Typical Instantaneous Forward Characteristics

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



DFN1608 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.40	0.60	0.016	0.024
A1	0	0.05	0	0.002
B	0.55	0.65	0.022	0.026
C	0.152		0.006	
D	0.70	0.90	0.028	0.035
E	1.50	1.70	0.060	0.067
K	0.40	0.50	0.016	0.020
L1	0.65	0.75	0.026	0.030
L	0.30	0.40	0.012	0.016

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SRB1040FCQ	DFN1608	3000PCS	7"

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