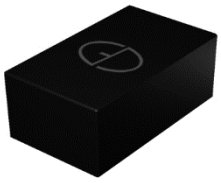
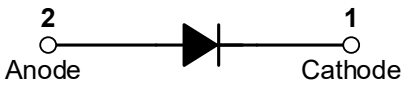
1A,60V Schottky Barrier Rectifier

Features

- Low forward voltage, low power loss
- Low leakage current
- High surge current
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21



DFN2513-2L



Applications

- SMPS
- Adapter
- Server Power

Mechanical Data

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec

Maximum Ratings & Electrical Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	SS160Y	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC blocking voltage	V_{DC}	60	V
Maximum average forward	$I_{F(AV)}$	1	A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load per diode	I_{FSM}	25	A
Operating junction temperature range	T_J	-55 to +125	°C
Storage temperature range	T_{STG}	-55 to +125	°C

Electrical Specifications (T_A=25℃ unless otherwise noted)					
Parameter	**Symbol**	**Test Conditions**	**Typ**	**Max**	**Unit**
Forward drop voltage (Note1)	V_F	I_F=1A, T_J =25℃	-	0.70	V
		I_F=1A, T_J =100℃	-	-	
Reverse leakage current @VR (Note2)	I_R	T_J =25℃	-	100	uA
		T_J =100℃	-	5	mA

Thermal-Mechanical Specifications (T_A=25℃ unless otherwise noted)			
Parameter	**Symbol**	**Typ**	**Unit**
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	28	°C /W
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	120	°C /W

Note：

1. Pulse test with PW=0.3ms, duty cycle=2%
2. Pulse test with PW=30ms

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

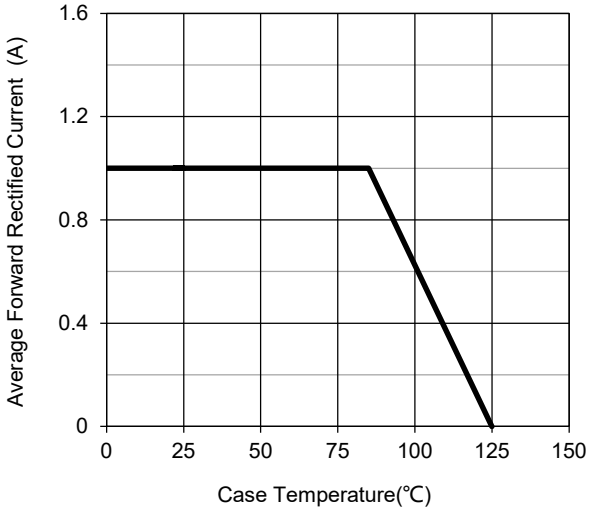


Fig.1 – Forward Current Derating Curve

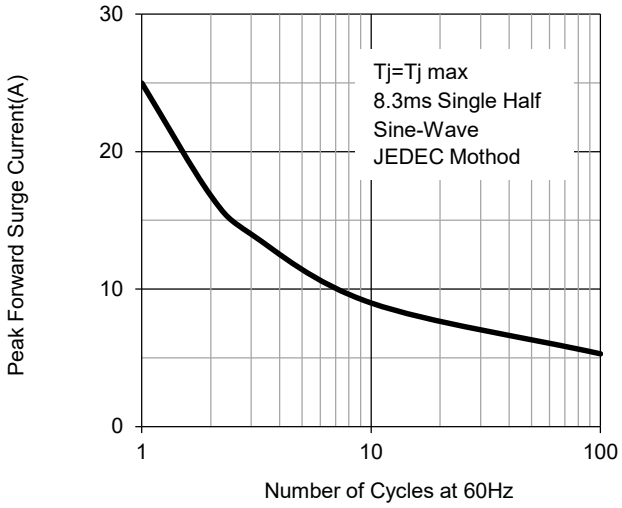


Fig.2 – Maximum Non-Repetitive Surge Current

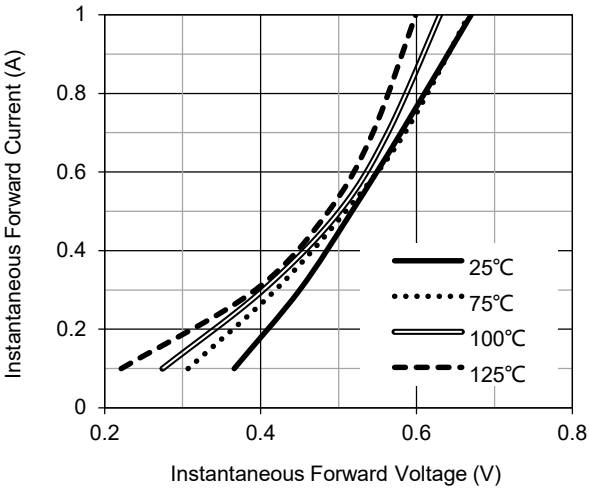


Fig.3 – Typical Forward Voltage Characteristics

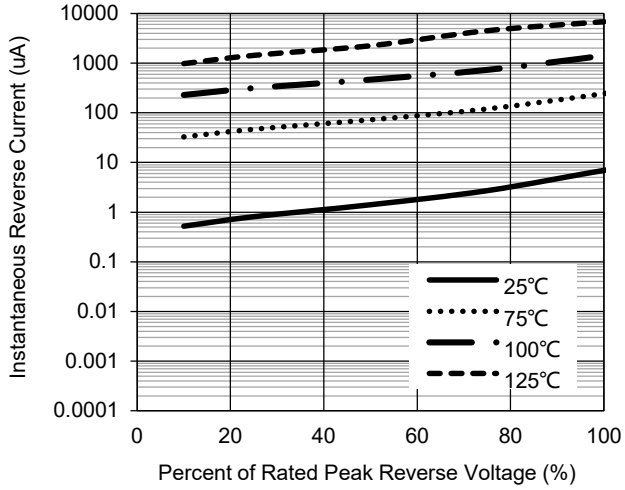


Fig.4 – Typical Reverse Current Characteristics

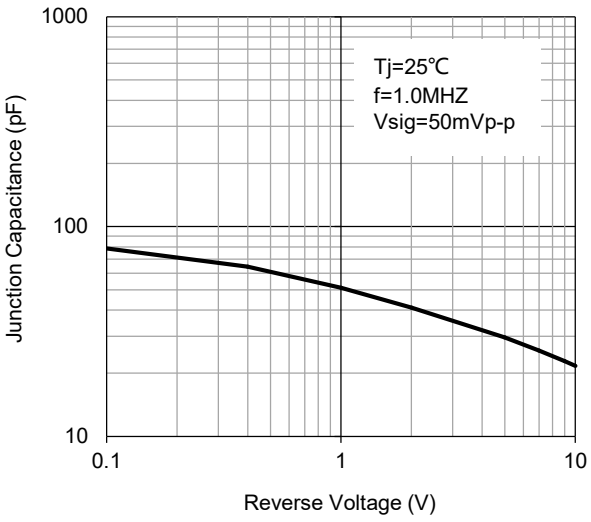
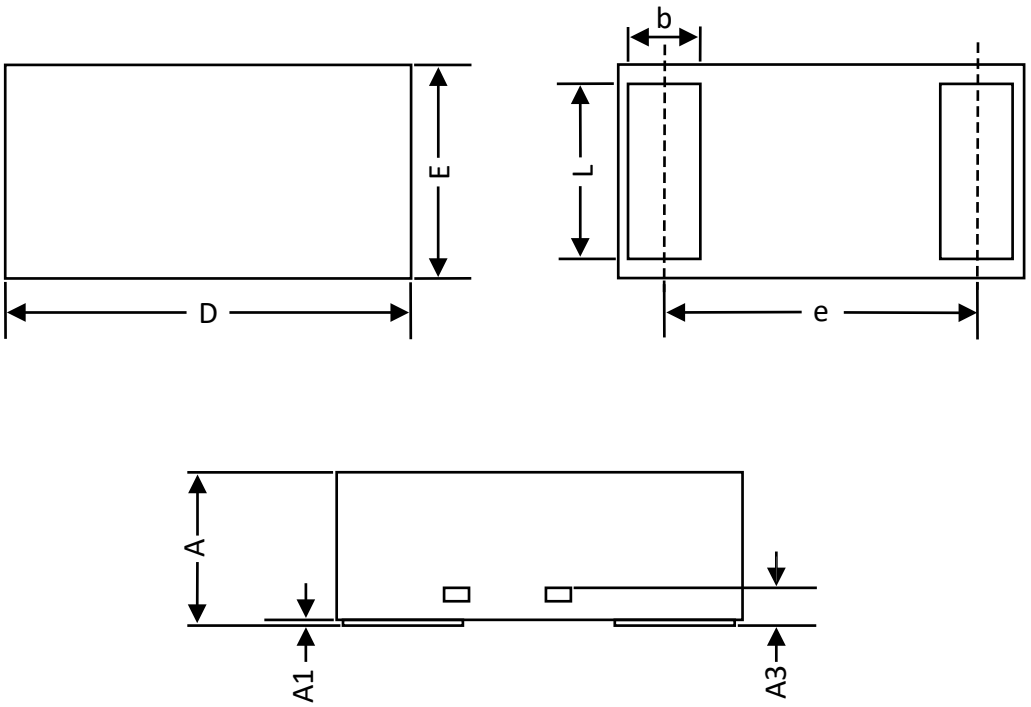


Fig.5 – Typical Junction Capacitance

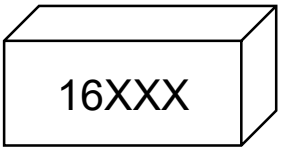
Package Outline Dimensions (Unit: millimeters)

DFN2513-2L



DFN2513-2L			
	Min.	Nom.	Max.
A	0.70	0.75	0.80
A1	0.00	-	0.05
A3	0.2 REF.		
D	2.45	2.50	2.55
E	1.30	1.35	1.40
b	0.6	0.65	0.70
L	0.90	1.00	1.10
e	1.70 BSC		

Marking Outline



1. Part Name: 16

2. Date Code: XXX

年份	2023	2024	2025	2026	2027	2028	…
代码	A	B	C	D	E	F	…

周期	第 1 周	第 2 周	…	第 28 周	第 29 周	第 30 周	…
代码	01	02	…	28	29	30	…

Revision History

Document Version	Date of release	Description of changes
Rev.A	2023.11.07	Preliminary Datasheet

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