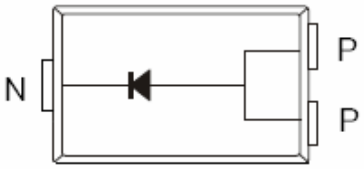
Features

- ♦ Super low VF
- ♦ Low Power loss,high efficiency
- ♦ Fast switching,high frequency
- ♦ High current capability
- ♦ Lead-Free, RoHS Compliant

TO-277

Application

- ♦ Low Voltage High Frequency Invers Circuit
- ♦ Low Voltage Continued Circuit and Protection Circuit
- ♦ Low Voltage,High Frequency Switching Power Supply



Pb-Free RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient Temperature unless otherwise specified.Single phase,half wave,60Hz,resistive or inductive load.For capacitive load.derate current by 20%.

SYMBOL	PARAMETER	Value	UNITS
VRRM	Maximum Recrrent Peak Reverse Votlage	50	V
VDC	Maximum DC Breakdown Voltage	50	V
IF(AV)	Maximum An Voltage	15	A
IFSM	Peak Forward Surge Current: single half sine-wace superimposed on rated load(JEDEC method)	300	A
IR	Maximum DC Reserve Current	0.2	mA
$R_{\theta JC}$	Typical Thermal Resistance，Junction to Case	3	°C
Tj,TSTG	Operating and Storage Junction Temperature Range	-55~155	°C

Order Information

Product	Marking	Package	Packaging	Min Unit Quantity
VL1550	L1550 LOTYWW	TO-277	5000/Reel	5000

Electronical Characteristic（T_A=25℃ unless otherwise noted）

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
BreakdownVoltage	**V_{BR}**	IR=0.5mA		50	--	--	**V**
Forward Voltage	**V_F**	IF=3A	TA=25℃	--	0.32	0.35	**V**
			TA=125℃	--	0.27	0.32	**V**
		IF=10A	TA=25℃	--	0.40	0.45	**V**
			TA=125℃	--	0.37	0.43	**V**
		IF=15A	TA=25℃	--	0.45	0.50	**V**
			TA=125℃		0.42	0.48	**V**
Reverse Current	**I_R**	VR=40V	TA=25℃	--	--	200	**μA**
			TA=125℃	--	--	45	**mA**

Typical Characteristic

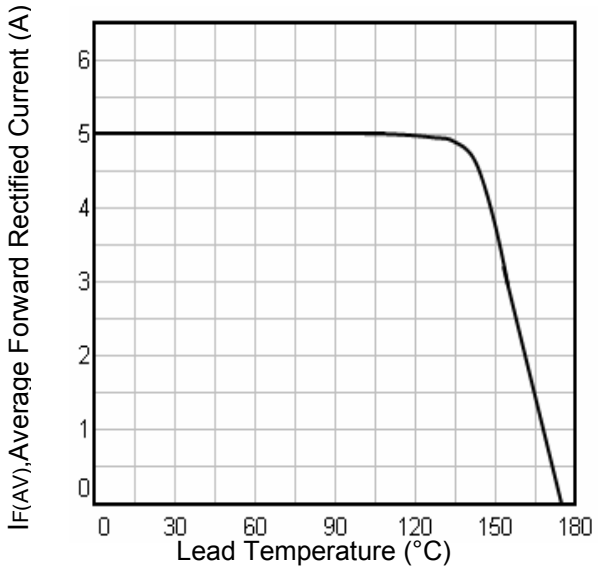


Fig1. Typical Forward Current Derating Curve

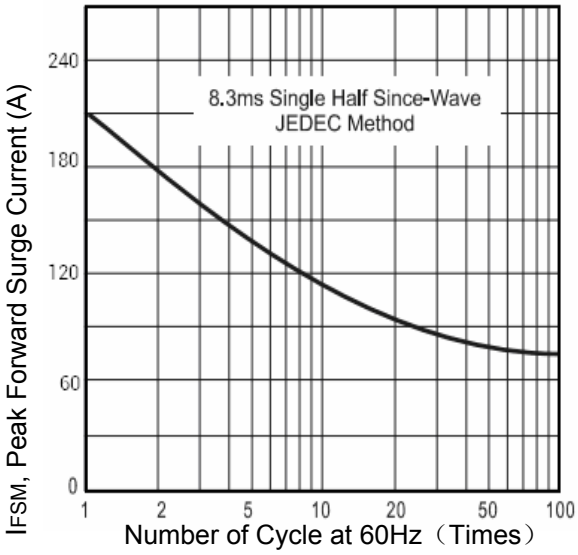


Fig2. Maxium Repetitive Surge Current

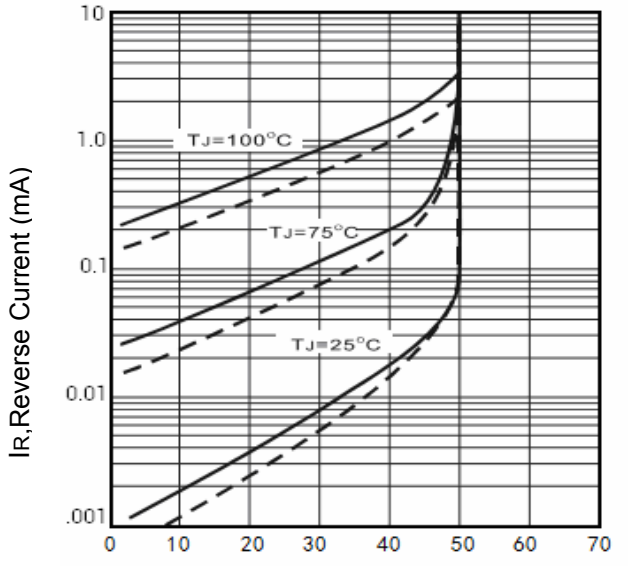


Fig3. Typical Reverse Current Characteristic

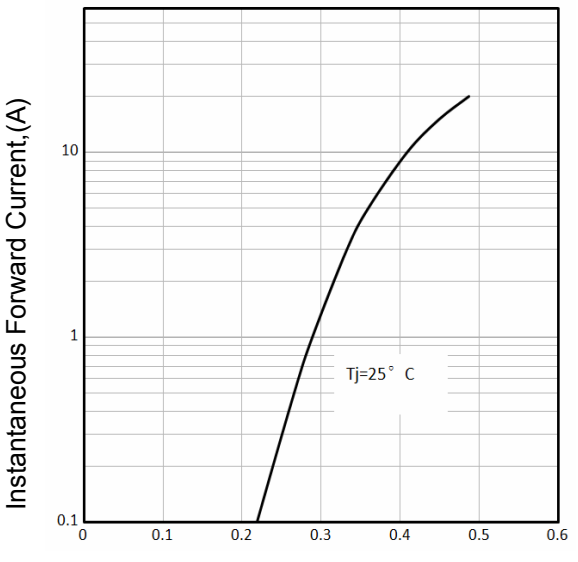
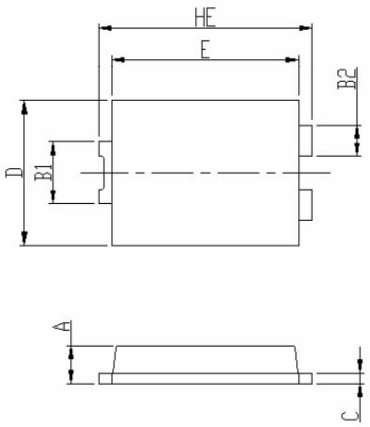


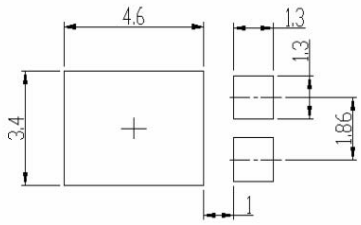
Fig4. Typical Forward Voltage Characteristic

TO-277 Package Outline



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

Soldering footprint



Unit：inch（mm）

Customer Service

Sales and Service:

Sales@vgsemi.com

Vanguard Semiconductor CO., LTD

TEL: (86-755) -26902410

FAX: (86-755) -26907027

WEB: **www.vgsemi.com**