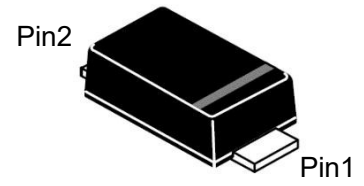
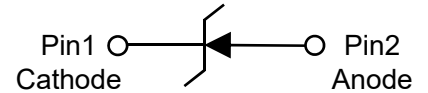
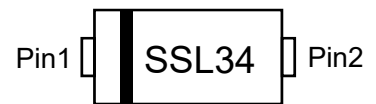


**Feature**

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters , free wheeling, and polarity protection applications


**SMAF(Top View)**

**Circuit Diagram**

**Marking (Top View)**
**Mechanical Characteristics**

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

**Absolute maximum rating@25°C**

Rating	Symbol	Value	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
RMS Voltage	$V_{RMS}$	28	V
DC Blocking Voltage	$V_{DC}$	40	V
Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	80	A
Forward Voltage at 3A	$V_F$	0.4	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25^{\circ}C$	0.5
		$T_a=100^{\circ}C$	50
Typical Junction Capacitance <sup>1)</sup>	$C_J$	400	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	100	°C/W
	$R_{\theta JL}$	30	
Operating Junction Temperature Range	$T_J$	-55 ~ +125	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.

## Typical Characteristics

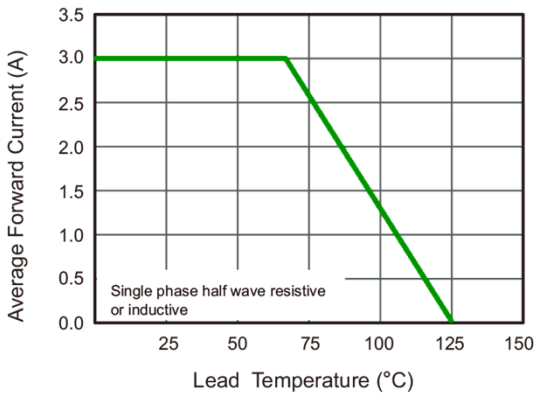


Fig.1 Forward Current Derating Curve

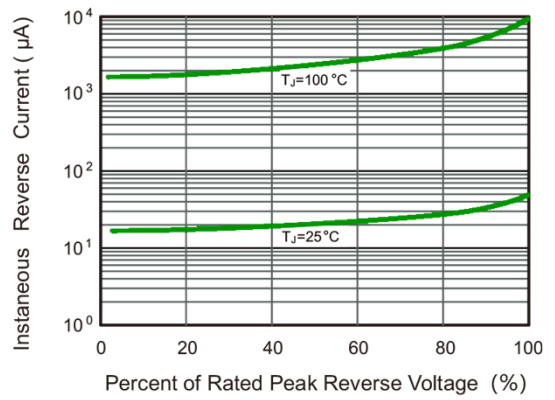


Fig.2 Typical Reverse Characteristics

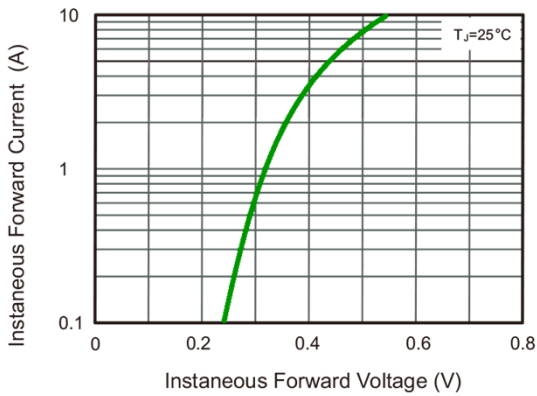


Fig.3 Typical Forward Characteristic

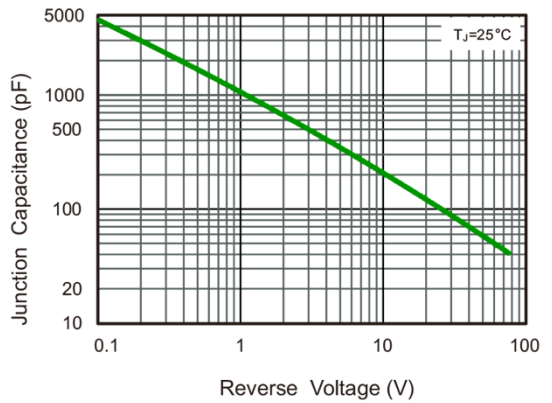


Fig.4 Typical Junction Capacitance

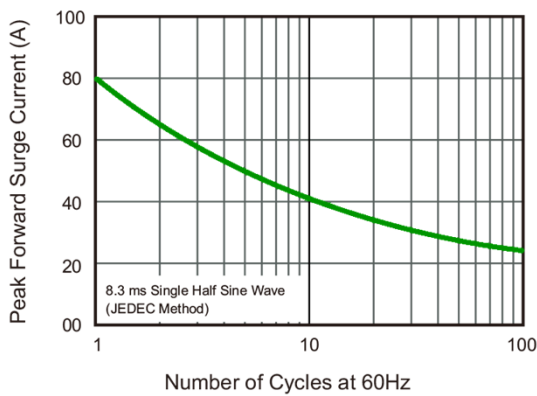
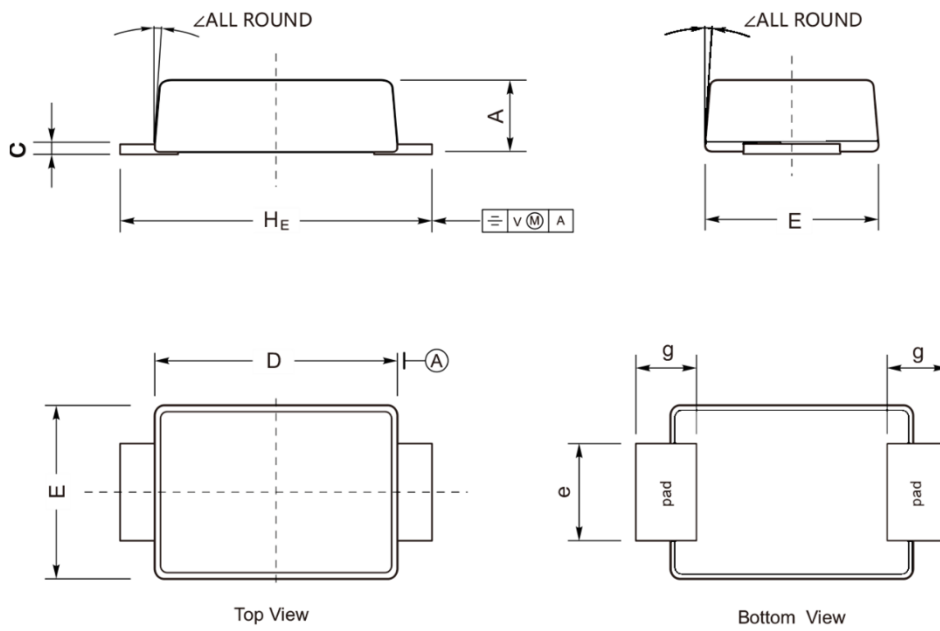
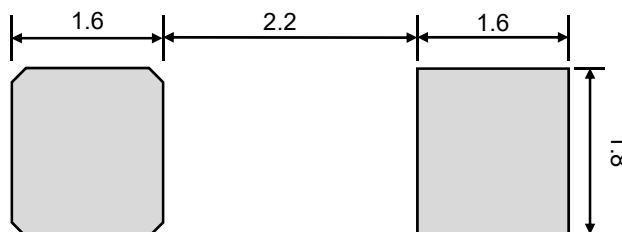


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

## Product Dimension (SMAF)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.90	1.20	0.035	0.047
C	0.12	0.20	0.005	0.008
D	3.30	3.70	0.130	0.146
E	2.40	2.70	0.094	0.106
e	1.30	1.60	0.051	0.063
g	0.80	1.20	0.031	0.047
$H_E$	4.40	4.90	0.173	0.193
$\sphericalangle$	7°		7°	



Unit: mm

Suggested PCB Layout

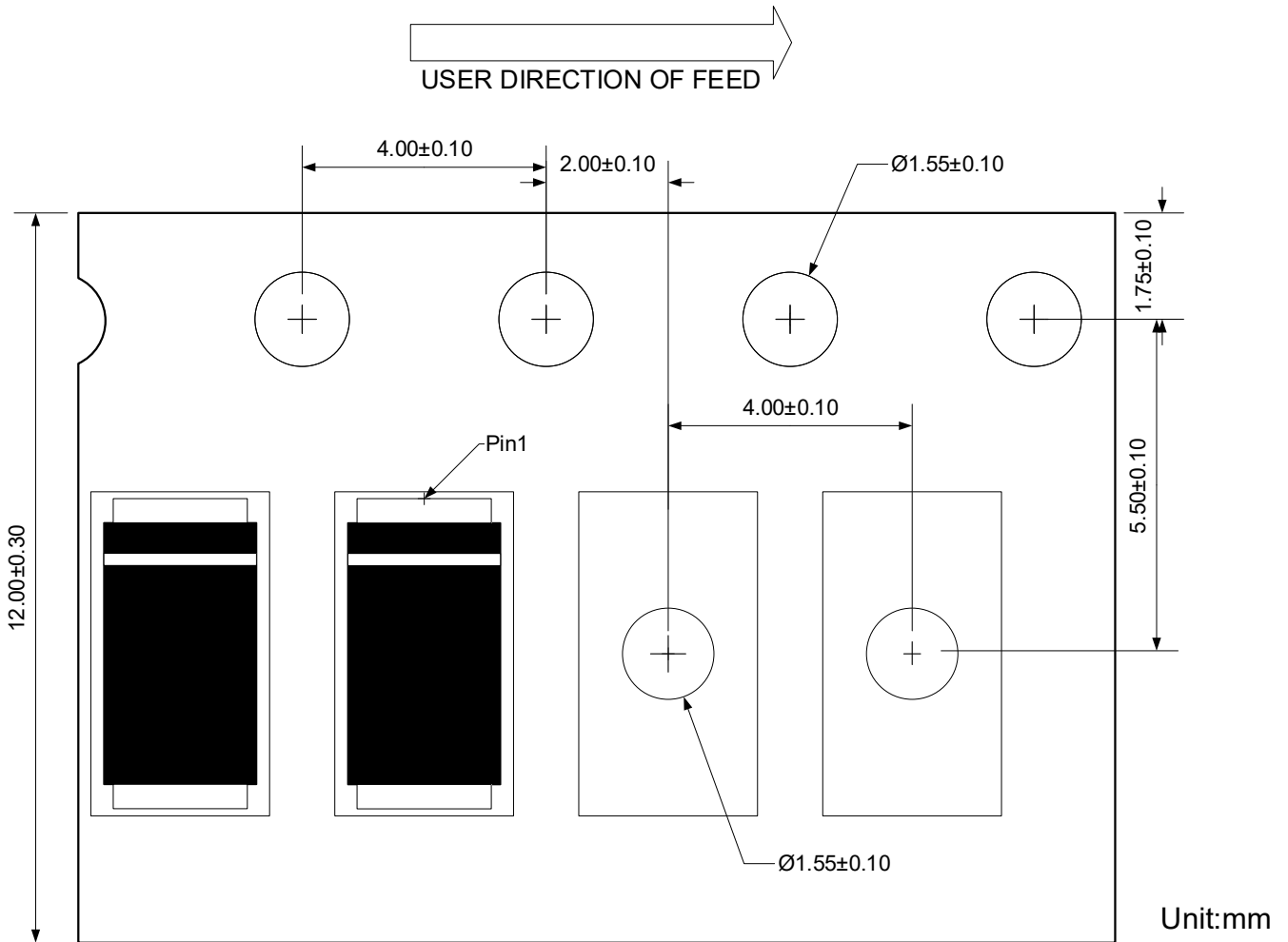
# Schottky Barrier Diode

# PSBDAF40V3L


## Ordering information

Device	Package	Reel	Shipping
PSBDAF40V3L	SMAF	13"	3000 / Tape & Reel

## Load with information




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