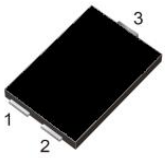
axelite 亞瑟萊特科技股份有限公司 AXElite Technology Co.,Ltd

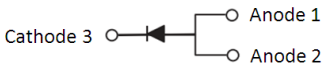
45V Trench MOS Barrier Schottky Rectifier

FEATURES

- Patented Trench MOS Barrier Schottky technology
- Excellent high temperature stability
- Low forward voltage
- Lower power loss/ High efficiency
- High forward surge capability
- Ideal for automated placement
- Moisture sensitivity: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



TO-277A(SMPC)



Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case：TO-277A(SMPC)

Molding compound, UL flammability classification rating 94V-0
Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

Terminal：Matte tin plated leads, solderable per JESD22-B102
Meet JESD 201 class 1A whisker test,
with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity：Indicated by cathode band

Weight： 0.095 gram (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER			Symbol	B8U45S			Unit
Maximum Repetitive Peak Reverse Voltage			V_{RRM}	45			V
Maximum Average Forward Rectified Current			$I_{F(AV)}$	8			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load per Diode			I_{FSM}	180			A
Maximum Instantaneous Forward Voltage per Diode (Note 1)	I_F = 8A	T_A = 25°C	V_F	-	0.40	0.50	V
		T_A = 125°C		-	0.34	0.43	
Maximum Instantaneous Reverse Current per Diode at Rated Reverse Voltage		T_A = 25°C	I_R	-	-	15	mA
		T_A = 125°C		-	50	140	mA
Maximum DC reverse voltage			V_{DC}	32			V
Typical Thermal Resistance per Diode			$R_{\theta jC}$	23			°C/W
Operating Temperature Range			T_J	- 40 to + 150			°C
Storage Temperature Range			T_{STG}	- 40 to + 150			°C

Note1 : Pulse Test with Pulse Width=300μs, 1% Duty Cycle

ORDERING INFORMATION				
PART NO.	**PACKING CODE**	**GREEN COMPOUND CODE**	**PACKAGE**	**PACKING**
B8U45S	S2	Suffix "G"	SMPC	6000/ 13" Plastic reel

MARKING INFORMATION

P/N = 8U45S
G = Green Compound
YW = Date Code
F = Factory Code

RATINGS AND CHATACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

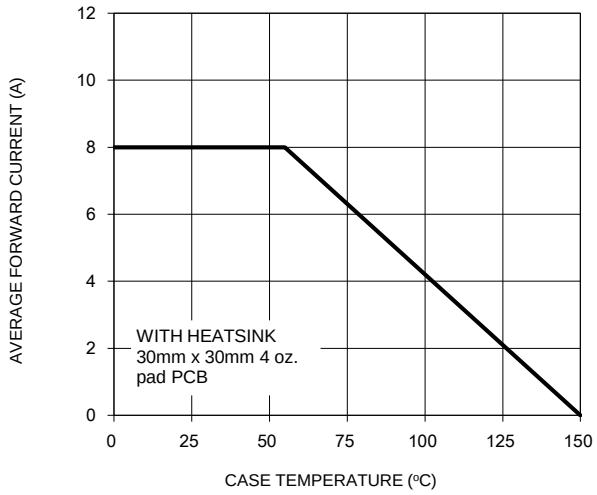


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

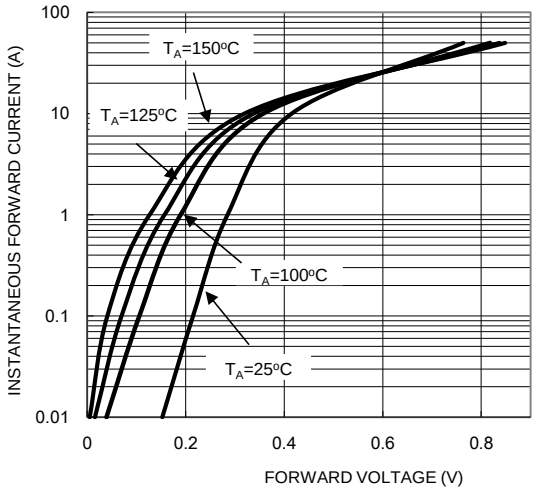


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

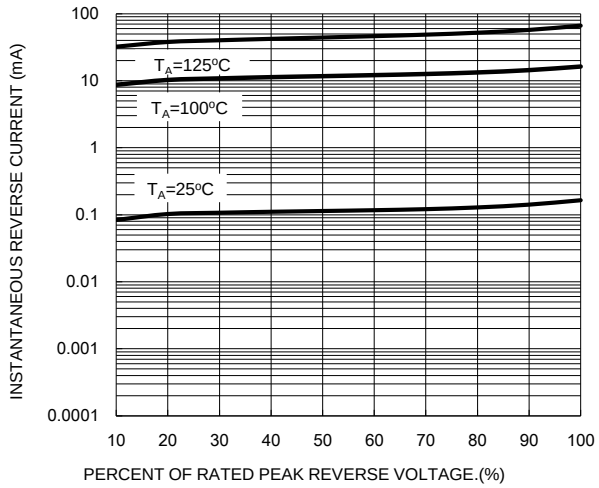
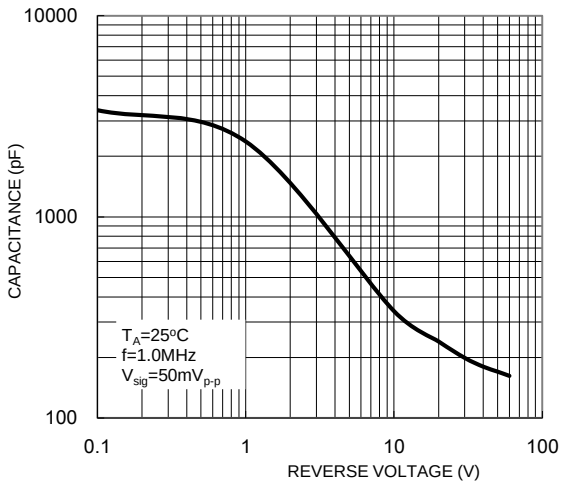
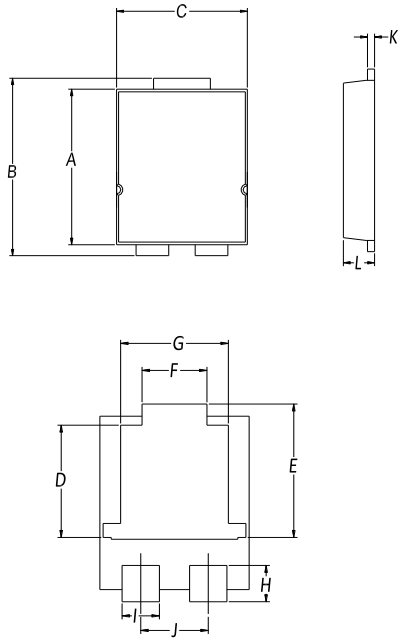


FIG. 4 TYPICAL JUNCTION CAPACITANCE

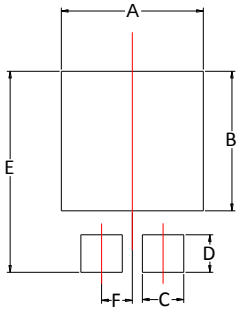


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	5.650	5.750	0.222	0.226
B	6.350	6.650	0.250	0.262
C	4.550	4.650	0.179	0.183
D	3.540	3.840	0.139	0.151
E	4.235	4.535	0.167	0.179
F	1.850	2.150	0.073	0.085
G	3.170	3.470	0.125	0.137
H	1.043	1.343	0.041	0.053
I	1.000	1.300	0.039	0.051
J	1.930	2.230	0.076	0.088
K	0.175	0.325	0.007	0.013
L	1.000	1.200	0.039	0.047

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	4.8
B	4.72
C	1.4
D	1.27
E	6.8
F	1.04