SamHop Microelectronics Corp.

SRD20U80SP

Ver 1.0

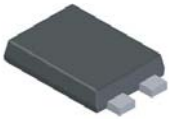
Trench Barrier Schottky Rectifier

PRODUCT SUMMARY			
V_{RRM}	I_O	$V_{F(MAX)}$ @ 25°C	$I_{R(MAX)}$ @ 25°C
80V	20A	0.66V	0.1mA

FEATURES

- Low forward voltage drop
- High forward surge capability
- Excellent High Temperature Stability

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Top View



Bottom View



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	80	V
V_{RWM}	Working Peak Reverse Voltage	80	V
V_{RM}	DC Blocking Voltage	80	V
$V_{R(RMS)}$	RMS Reverse Voltage	56	V
I_O	Average Rectified Output Current	20	A
I_{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	250	A

THERMAL CHARACTERISTICS

Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient	70	°C/W
T_J	Operating Temperature Range	-55 to 150	°C
T_{STG}	Storage Temperature Range	-55 to 175	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_F	Forward Voltage Drop	I_F = 20A, T_J = 25°C		0.61	0.66	V
		I_F = 20A, T_J = 125°C		0.57	0.62	V
I_R	Leakage Current	V_R = 80V, T_J = 25°C		23	100	uA
		V_R = 80V, T_J = 125°C			50	mA

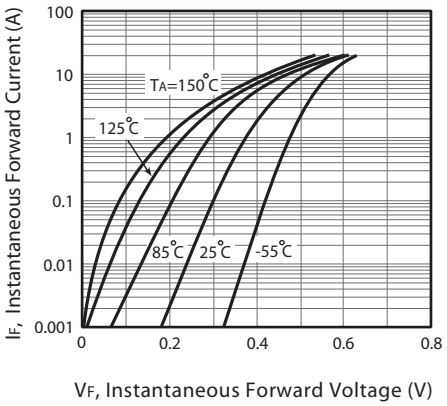


Figure 1. Typical Forward Characteristics

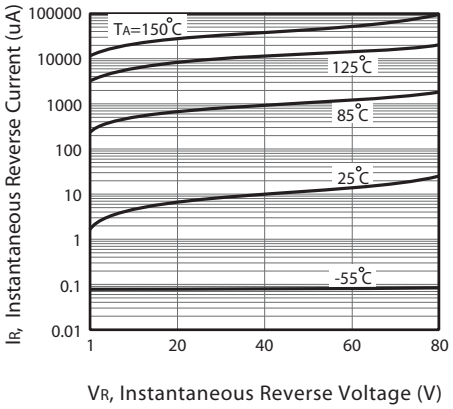


Figure 2. Typical Reverse Characteristics

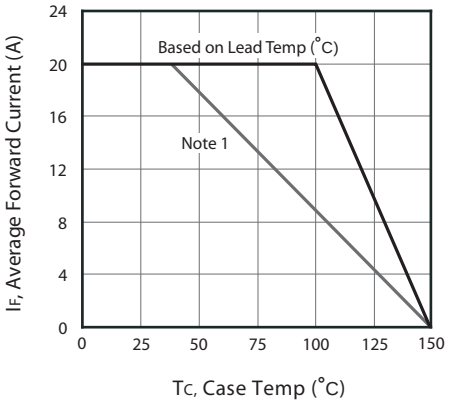


Figure 3. Forward Current Derating Curve

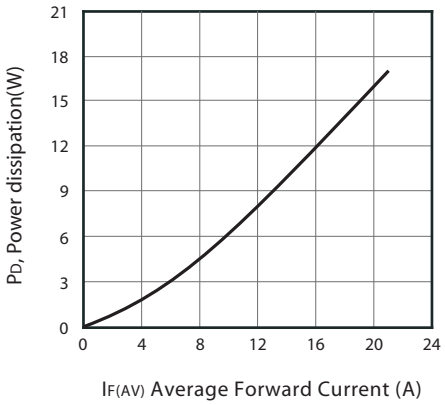
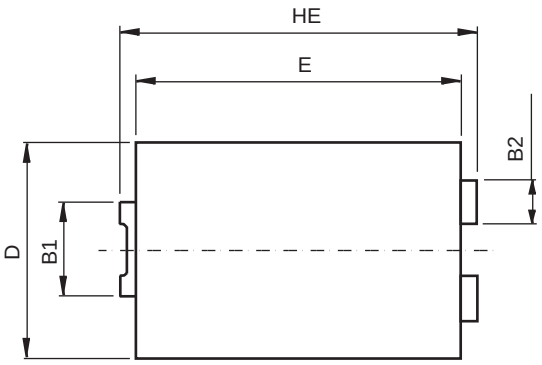


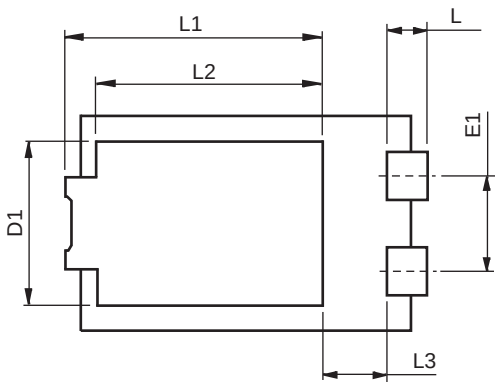
Figure 4. Forward Power Dissipation

Note : 1.Device mounted on FR-4 substrate, 2oz copper.

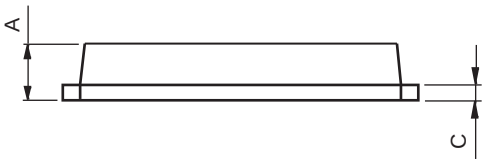
PACKAGE OUTLINE DIMENSIONS

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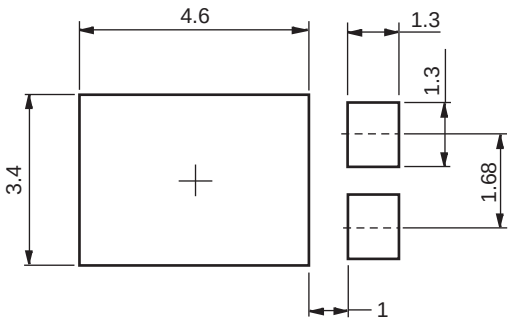




SYMBOLS	MILLIMETERS	
	MIN.	MAX.
HE	6.40	6.60
E	5.60	5.80
D	4.10	4.30
B1	1.70	1.90
B2	0.80	1.00
A	1.05	1.20
C	0.30	0.40
L	0.85	1.10
L1	4.20	4.40
L2	3.52 Typ.	
L3	1.10	1.40
D1	3.00	3.30
E1	1.86 Typ.	



Mounting Pad Layout (unit:mm)



TOP MARKING DEFINITION

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