

Schottky Rectifier



Features

- Ideal for automated placement
- Low power losses
- High forward surge capability

Typical Applications

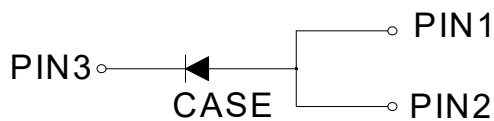
For use in lighting, fast switching rectification of power suppliers, inverters, converters, and freewheeling diodes for consumer, automotive, and telecommunication.

Mechanical Data

- **Package:** TO-277

Molding compound meets UL 94 V-0 flammability rating, -compliant, Halogen free

- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS5U100
Device marking code			SS5U100
Repetitive Peak Reverse Voltage	V _{RRM}	V	100
Average Rectified Output Current @60Hz -sine wave, R- load, T _c =125°C	I _O	A	5
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	120
Current Squared Time @1ms≤t≤8.3ms T _j =25°C	I ² t	A ² s	59
Storage Temperature	T _{stg}	°C	-55 ~+150
Junction Temperature	T _j	°C	-55 ~+150

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	V _{FM}	V	I _{FM} =5.0A, T _j =25°C	-	0.54	0.6
			I _{FM} =3.0A, T _j =25°C	-	0.45	0.51
Reverse Breakdown Voltage	V _{BR}	V	I _R =0.5mA	100	-	-
Leakage Current	I _R	mA	V _R =100V, T _j =25°C	-	-	0.2
			V _R =100V, T _j =125°C	-	-	20

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS

SS5U100

■ Thermal Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS5U100
Thermal Resistance	Junction to Case	R _{θJ-C}	℃/W	8

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS5U100	F1	Approximate 0.0816	5000	10000	80000	13" reel

■ Characteristics(Typical)

FIG.1: I_o-T_c Curve

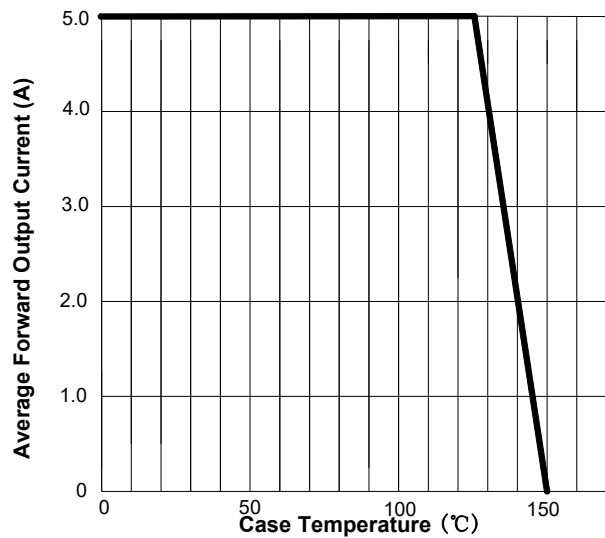


FIG.2: Forward Surge Current Capability

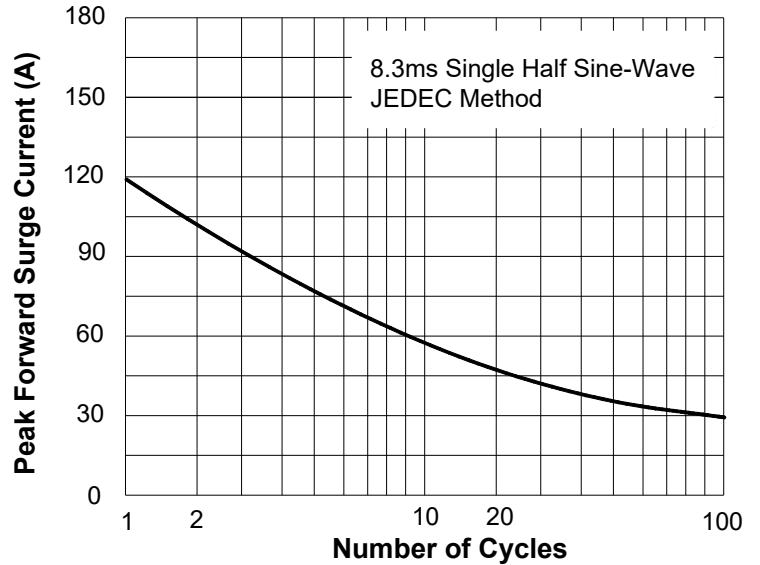


FIG.3: Forward Voltage

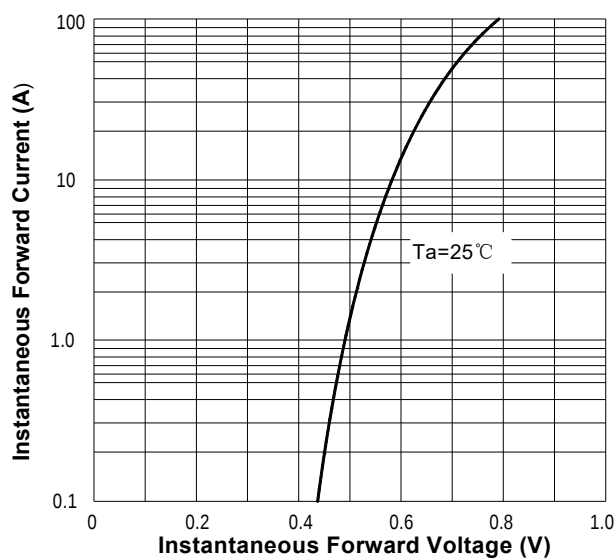
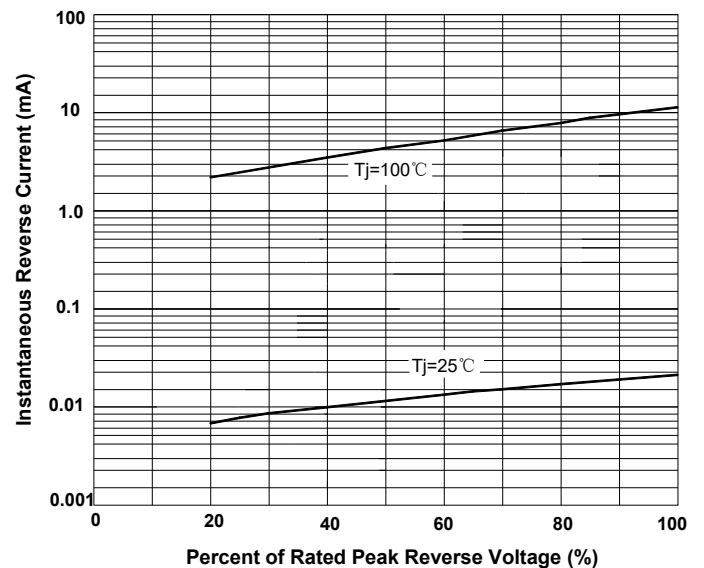
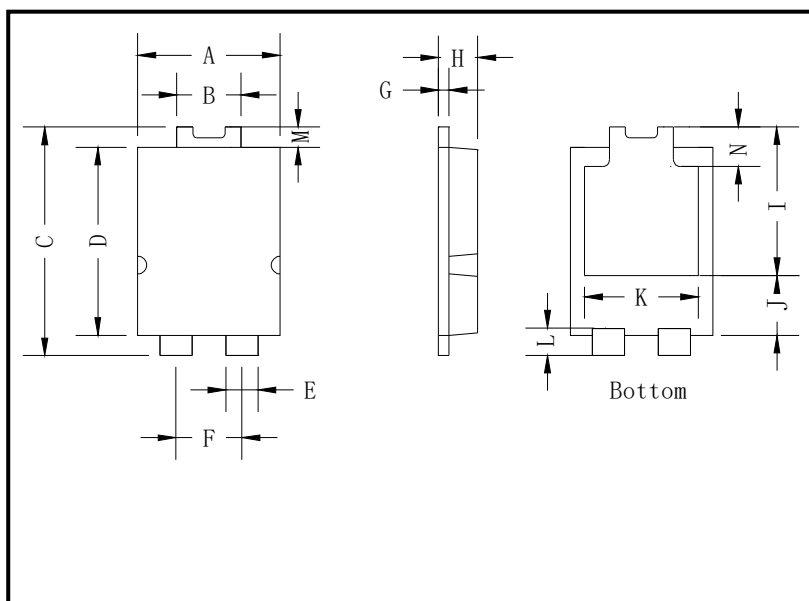


FIG.4: Typical Reverse Characteristics

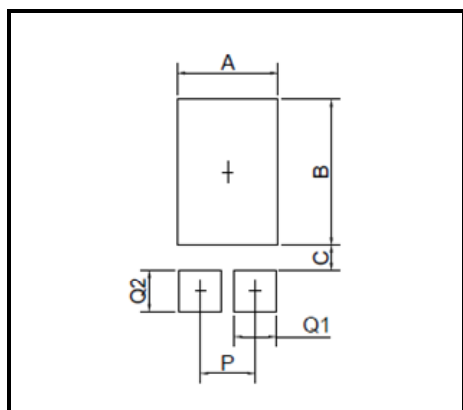


■ Outline Dimensions



TO-277		
Dim	Min(mm)	Max(mm)
A	3.90	4.10
B	1.70	1.90
C	6.40	6.60
D	5.30	5.50
E	0.80	1.00
F	1.85 ref.	
G	0.35	0.45
H	1.10	1.20
I	4.10	4.50
J	1.50	1.90
K	2.90	3.40
L	0.55	0.75
M	0.50 ref.	
N	1.15 ref.	

■ Suggested pad layout



DIM	MIN.(mm)
A	3.36
B	4.86
C	0.85
P	1.84
Q1	1.40
Q2	1.40

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