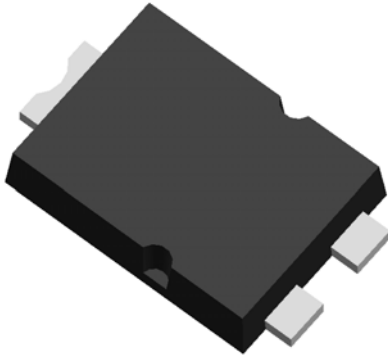


Schottky Rectifier

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, RoHS-compliant, Halogen free

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

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS15U60
Device marking code			SS15U60
Repetitive Peak Reverse Voltage	V_{RRM}	V	60
Average Rectified Output Current @60Hz -sine wave, R- load, $T_a=85^\circ\text{C}$	I_o	A	15
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	A	275
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$	I^2t	A^2s	313
Storage Temperature	T_{stg}	$^\circ\text{C}$	-55 ~ +150
Junction Temperature	T_j	$^\circ\text{C}$	-55 ~ +150

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=15.0\text{A}, T_j=25^\circ\text{C}$	-	0.52	0.55
			$I_{FM}=15.0\text{A}, T_j=125^\circ\text{C}$	-	0.47	0.50
Reverse Breakdown Voltage	V_{BR}	V	$I_R=0.5\text{mA}$	60	-	-
Leakage Current	I_R	mA	$V_R=60\text{V}, T_j=25^\circ\text{C}$	-	-	0.5
			$V_R=60\text{V}, T_j=125^\circ\text{C}$	-	-	50



SS15U60

■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS15U60
Thermal Resistance	Junction to Case	$R_{\theta J-C}$	$^{\circ}\text{C}/\text{W}$	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
SS15U60	F1	Approximate 0.0828	5000	10000	80000	13" reel

■ Characteristics(Typical)

FIG.1: I_o - T_c Curve

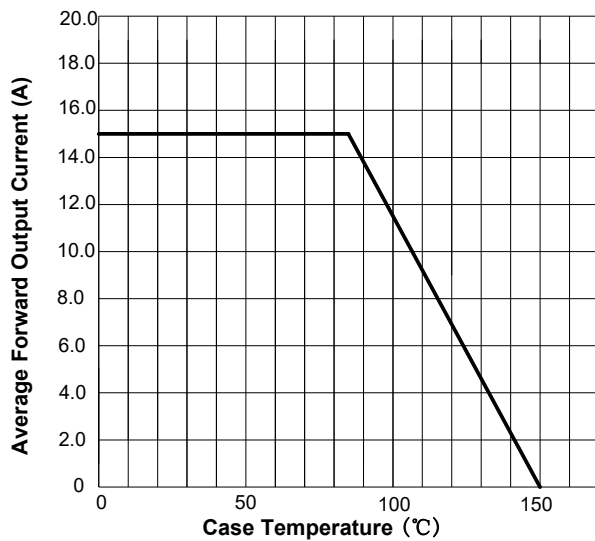


FIG.2: Forward Surge Current Capability

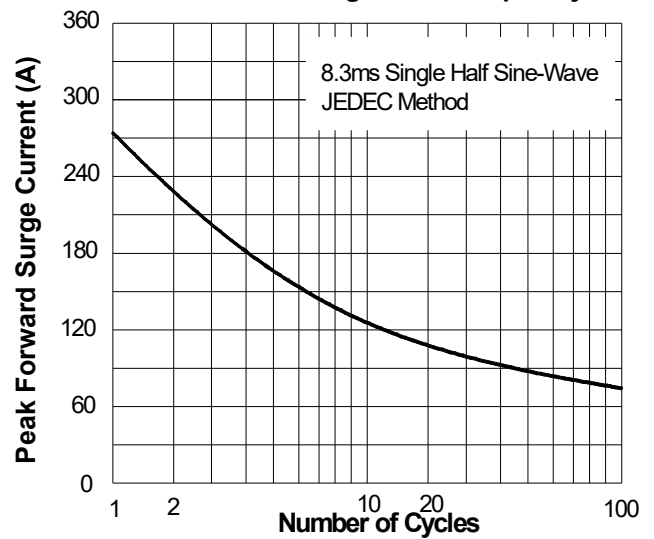


FIG.3: Forward Voltage

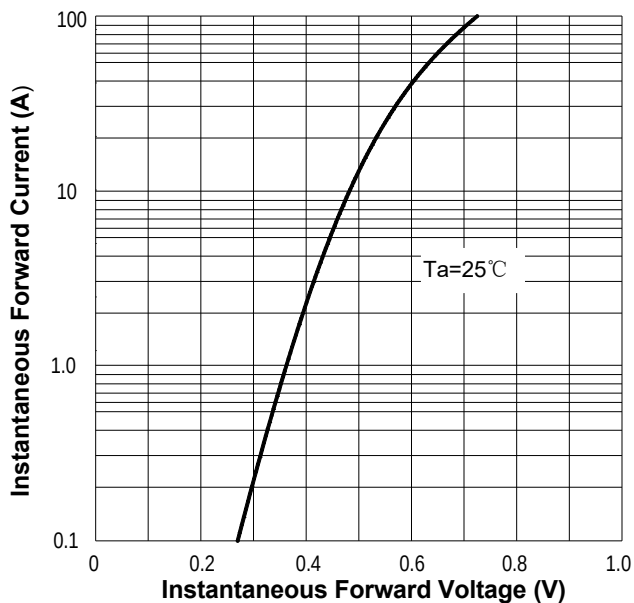
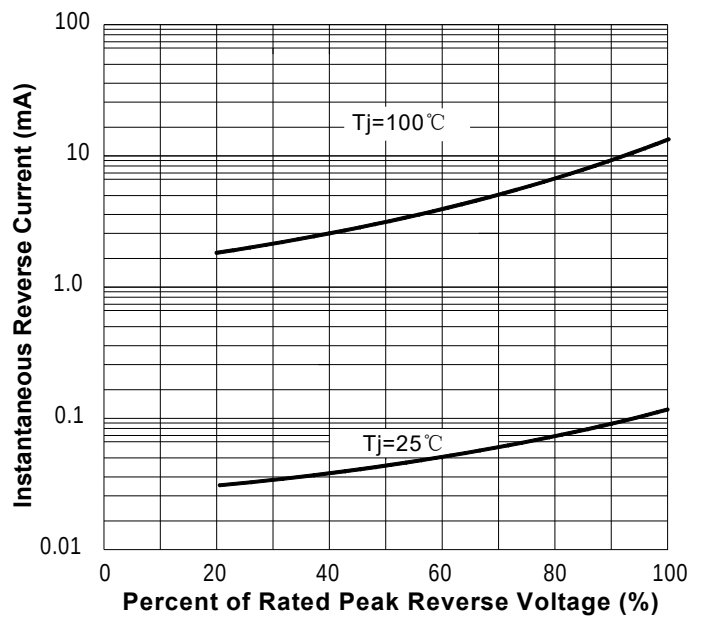
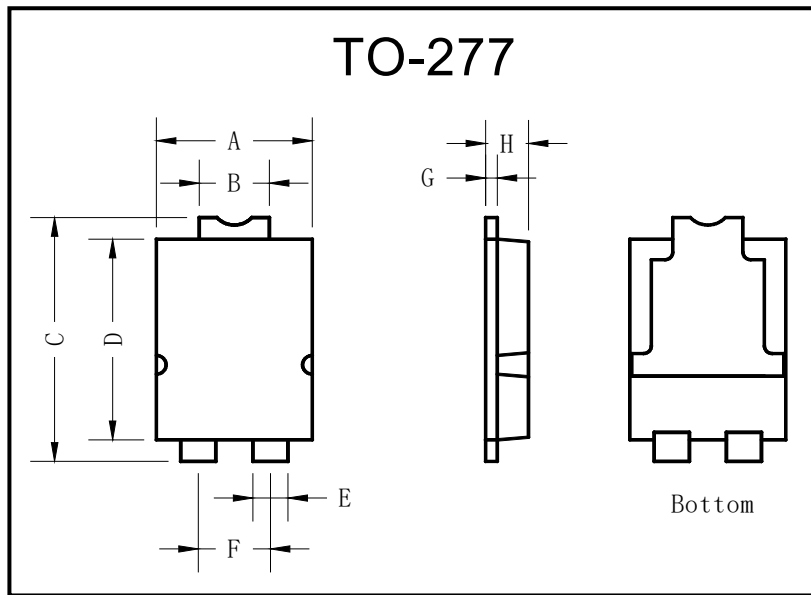


FIG.4: Typical Reverse Characteristics

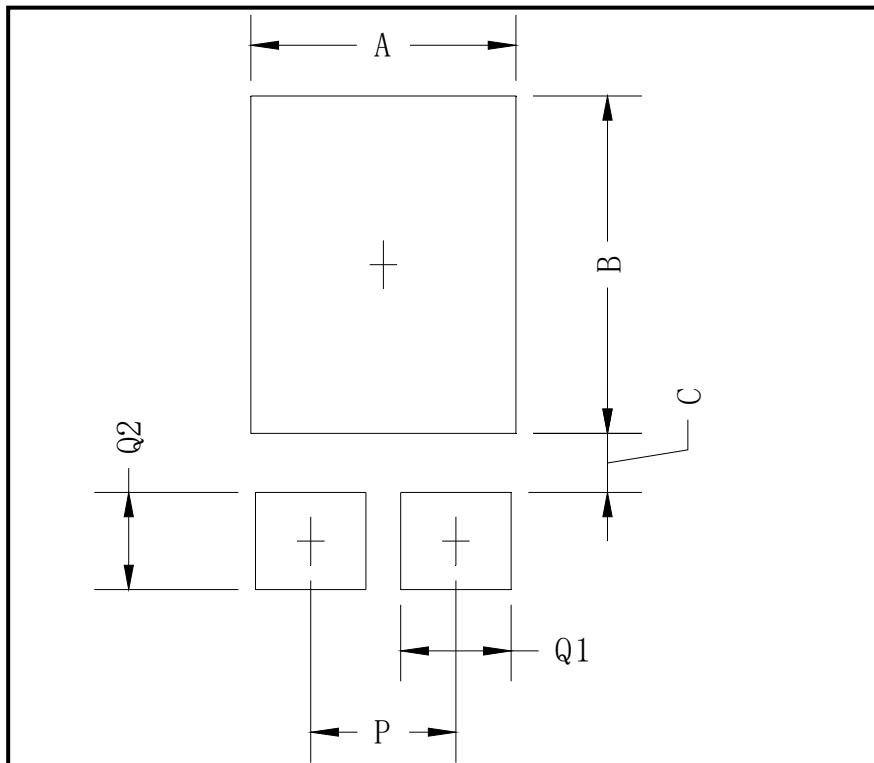


■ Outline Dimensions



TO-277		
Dim	Min(mm)	Max(mm)
A	3.9	4.1
B	1.7	1.9
C	6.4	6.6
D	5.2	5.4
E	0.8	1.0
F	1.8	1.9
G	0.25	0.35
H	1.05	1.15

■ Suggested pad layout



Dim	Min(mm)
A	3.36
B	4.86
C	0.85
P	1.84
Q1	1.4
Q2	1.4



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