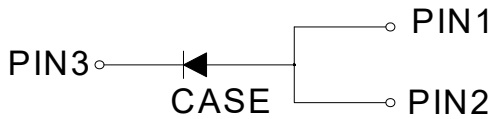
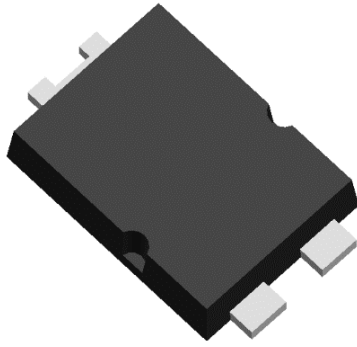


Schottky Rectifier



Features

- Ideal for automated placement
- Low power losses
- High forward surge capability
- Meets MSL level1, per J-STD-020, LF maximum peak of 260 °C
- Part no. with suffix "Q" means AEC-Q101 qualified

Typical Applications

For use in lighting, fast switching rectification of power suppliers, inverters, converters, and freewheeling diodes for consumer, 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	SS15U60PQ
Device marking code			SS15U60P
Repetitive Peak Reverse Voltage	V_{RRM}	V	60
Average Rectified Output Current @60Hz -sine wave, R- load, $T_c=107^\circ\text{C}$	I_O	A	15
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	A	300
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_J=25^\circ\text{C}$	I^2t	A^2s	375
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	$I_{FM}=5\text{A}, T_J=25^\circ\text{C}$	-	0.47	0.55
			$I_{FM}=15\text{A}, T_J=25^\circ\text{C}$	-	0.68	0.8
Reverse Breakdown Voltage	V_{BR}	V	$I_R=0.5\text{mA}$	60	-	-
Leakage Current	I_R	mA	$V_R=60\text{V}, T_J=25^\circ\text{C}$	-	-	0.1
			$V_R=60\text{V}, T_J=100^\circ\text{C}$	-	-	50
Typical junction capacitance	C_J	pF	$V_R=4\text{V}, f=1\text{MHz}$	-	490	-



SS15U60PQ

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

PARAMETER		SYMBOL	UNIT	SS15U60PQ
Thermal Resistance	Junction to Case	$R_{\theta\text{-JC}}$	$^\circ\text{C/W}$	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
SS15U60PQ	F1	Approximate 0.0821	5000	10000	80000	13" reel

■ Characteristics (Typical)

Fig.1: I_O - T_C Curve

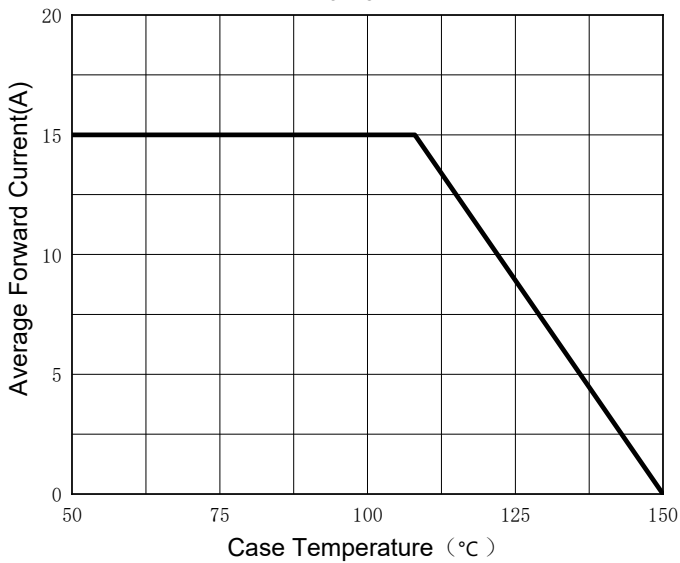


Fig.2: Forward Surge Current Capability

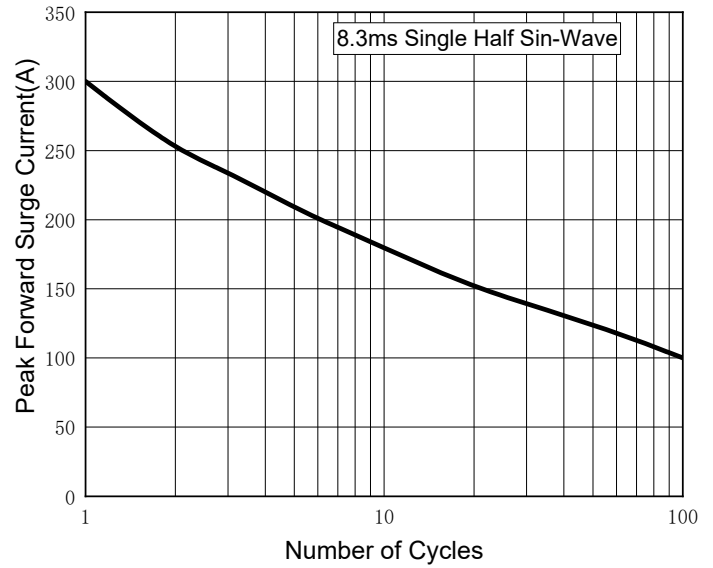


Fig.3: Typical Forward Characteristics

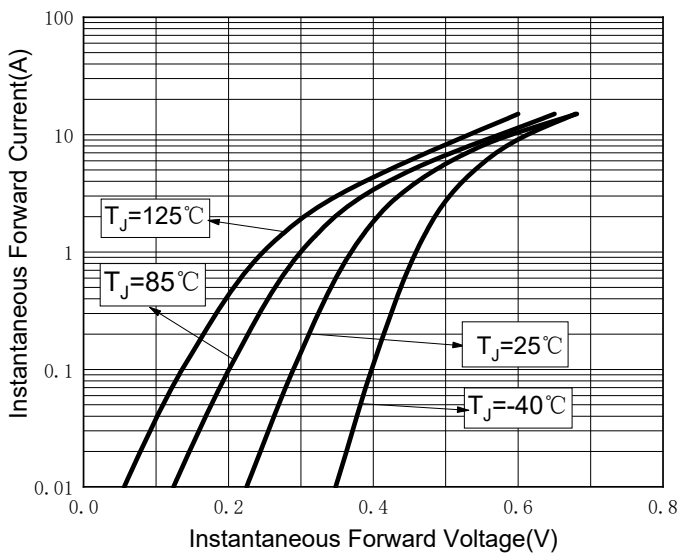
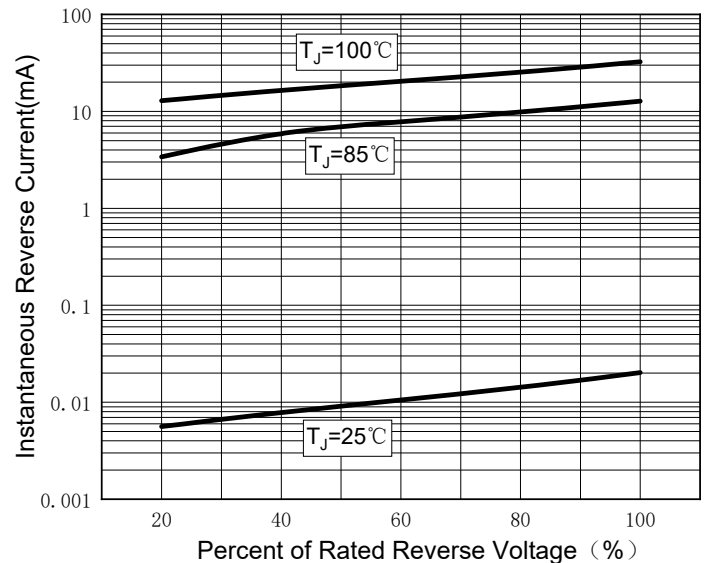


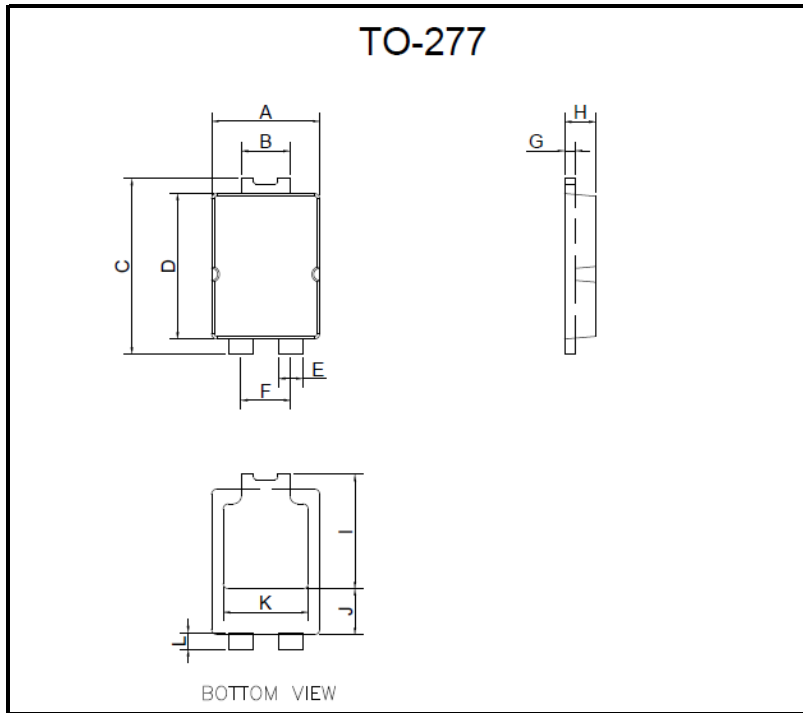
Fig.4: Typical Reverse Characteristics





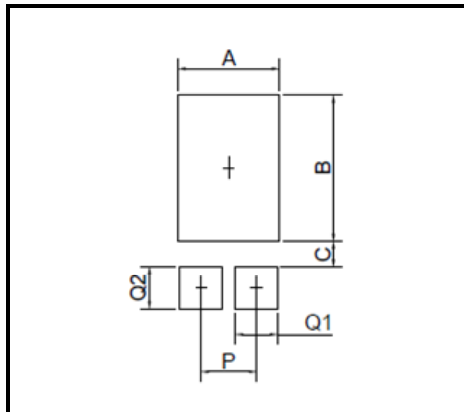
SS15U60PQ

■ Outline Dimensions



DIM	mm	
	MIN.	MAX.
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

■ Suggested pad layout



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



SS15U60PQ

Disclaimer

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