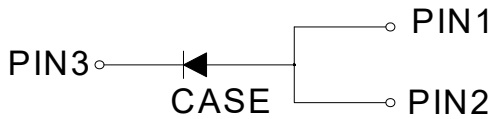
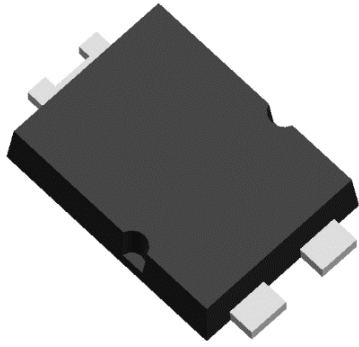


## Schottky Rectifier



### 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	SS10U200PQ
Device marking code			SS10U200P
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	200
Average Rectified Output Current @60Hz -sine wave	$I_O$	A	10
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	$I_{FSM}$	A	200
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_J=25^\circ\text{C}$	$I^2t$	$\text{A}^2\text{s}$	166
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-55 ~ +175
Junction Temperature	$T_J$	$^\circ\text{C}$	-55 ~ +175

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Typ	Max
Instantaneous forward voltage	$V_F$	V	$I_F=10\text{A}, T_J=25^\circ\text{C}$	0.85	0.9
			$I_F=10\text{A}, T_J=125^\circ\text{C}$	0.70	0.85
Reverse current	$I_R$	$\mu\text{A}$	$V_R=200\text{V}, T_J=25^\circ\text{C}$	-	1
		$\text{mA}$	$V_R=200\text{V}, T_J=125^\circ\text{C}$	-	5
Typical junction capacitance	$C_J$	$\text{pF}$	$V_R=4\text{V}, f=1\text{ MHz}$	160	-



# SS10U200PQ

## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS10U200PQ
Thermal Resistance	Junction to Case	R <sub>θj-c</sub>	°C/W	8

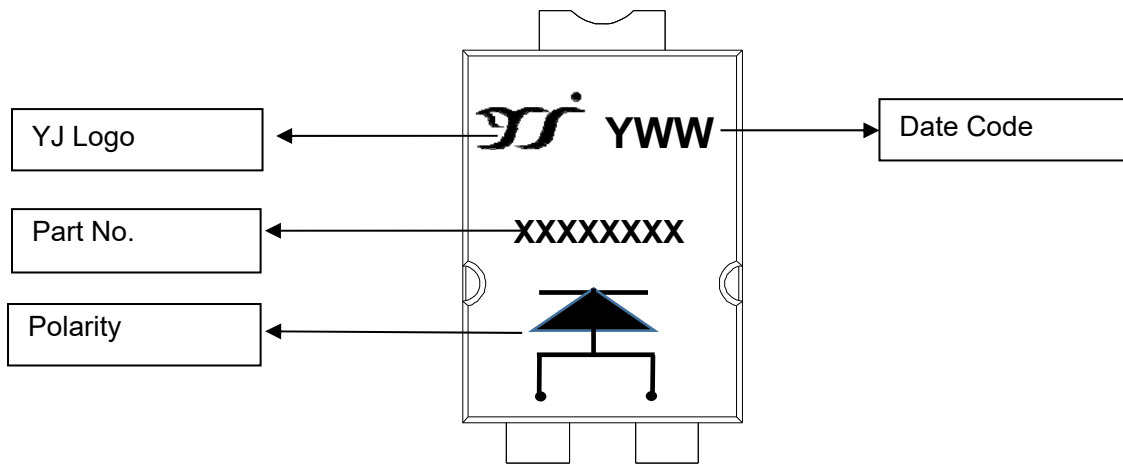
Note

(1) Thermal resistance from junction to Case mounted on P.C.B. with 35mm\*25mm copper pad areas

## ■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS10U200PQ	F1	Approximate 0.106	5000	80000	13" reel

## ■ Marking Information



Note:

1. All marking is at middle of the product body
  2. All marking is in laser printing
  3. XXXXXX is part no., like SS10U200P.
  4. Body color: Black
  5. YWW is date code, "Y" is year. "WW" is week.
- For instance: The 15<sup>th</sup> week of 2019, date code is 915



## ■ Characteristics (Typical)

Fig.1:Forward Current Derating Curve

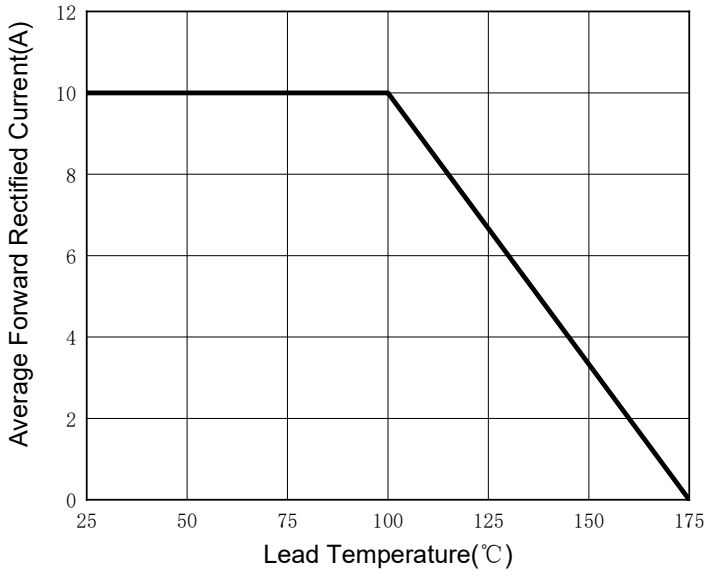


Fig.2:Forward Surge Current Capability

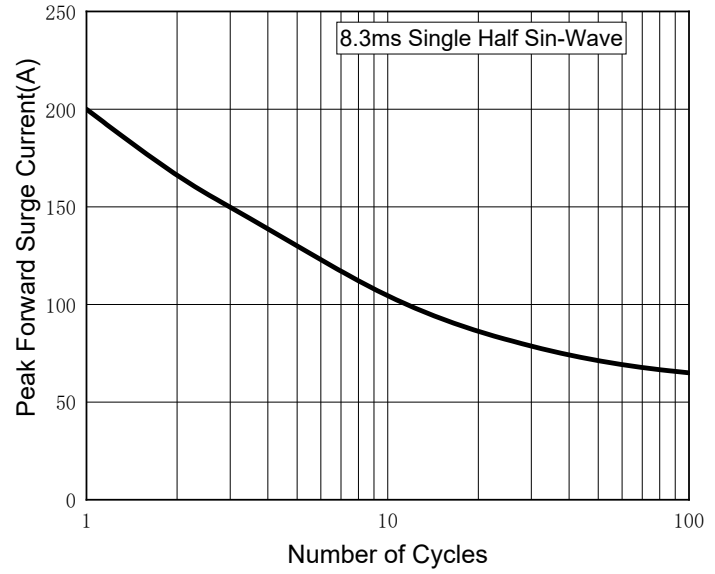


Fig.3:Typical Instantaneous Forward Characteristics

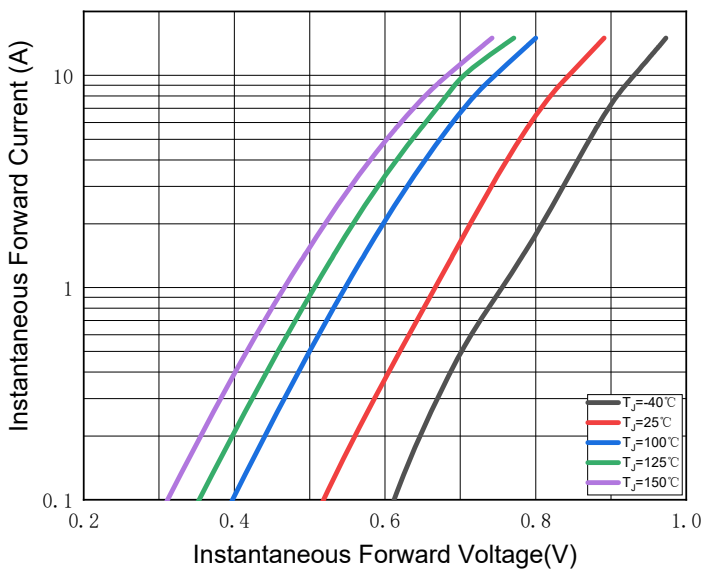
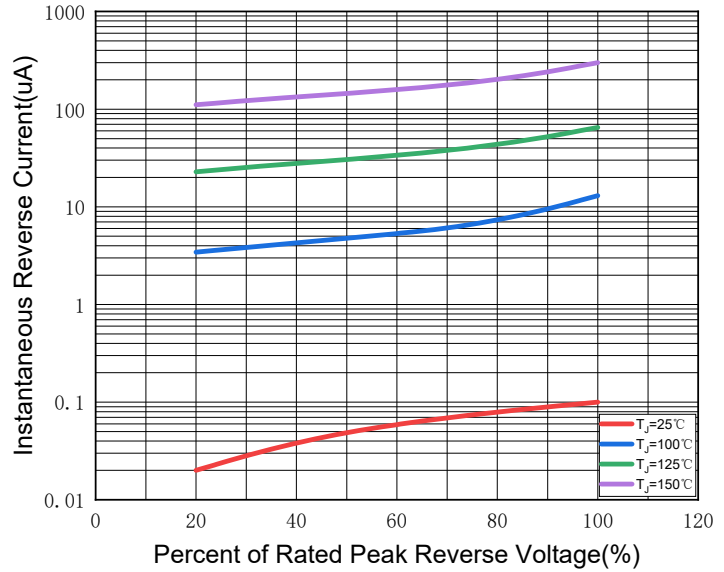


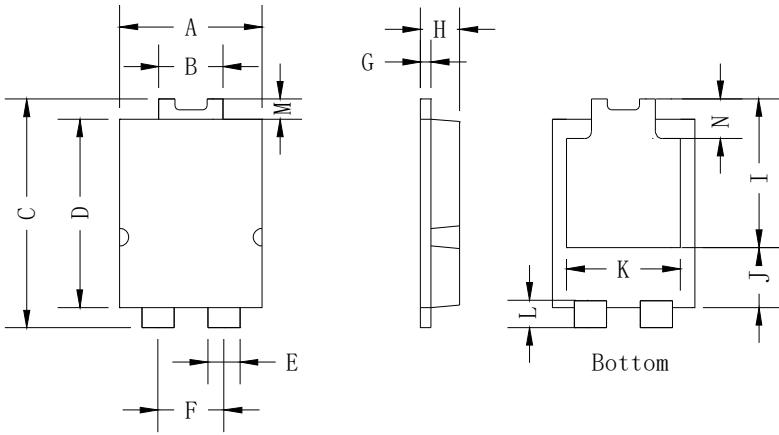
Fig.4:Typical Reverse Leakage Characteristics





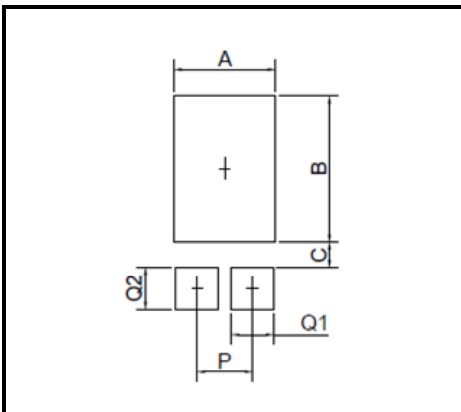
# SS10U200PQ

## ■ 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
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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