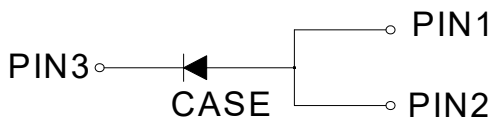
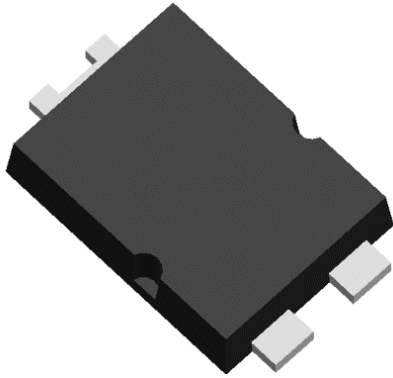


## Schottky Rectifier



### Features

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

### 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<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS5U50PAQ	SS5U60PAQ
Device marking code			SS5U50PA	SS5U60PA
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	60
Average Rectified Output Current @60Hz -sine wave (FIG.1)	I <sub>O</sub>	A	5	
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	200	
Current Squared Time @1ms≤t≤8.3ms T <sub>j</sub> =25°C	I <sup>2</sup> t	A <sup>2</sup> s	166	
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150	
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150	

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Peak Forward Voltage	VFM	V	IFM =5.0A, T <sub>j</sub> =25°C	-	-	0.64
			IFM =5.0A, T <sub>j</sub> =125°C	-	-	0.55
Reverse Breakdown Voltage	VBR	V	IR=0.5mA SS5U50PAQ	50	-	-
			IR=0.5mA SS5U60PAQ	60	-	-
Leakage Current	IR	mA	VR= VRRM, T <sub>j</sub> =25°C	-	-	0.15
			VR= VRRM, T <sub>j</sub> =125°C	-	-	20



# SS5U50PAQ THRU SS5U60PAQ

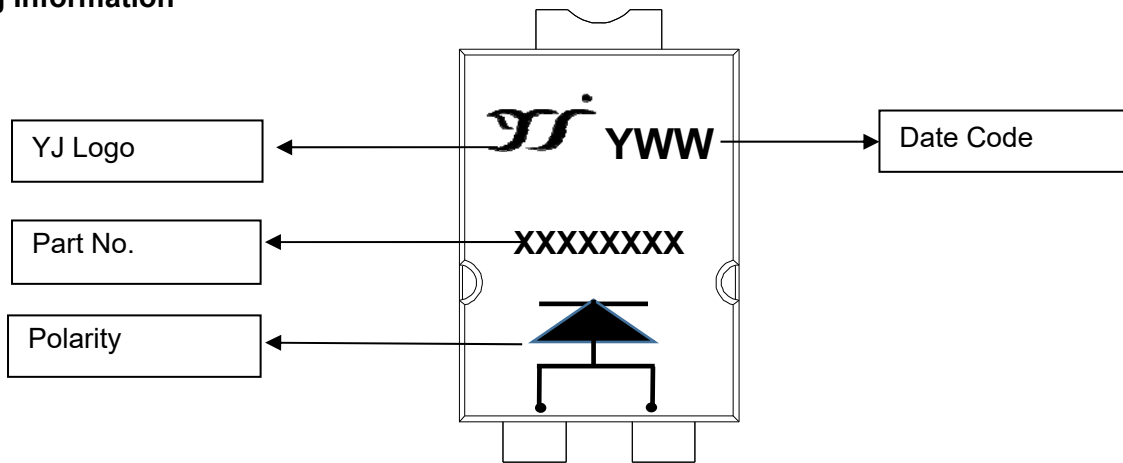
## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS5U50PAQ / SS5U60PAQ
Thermal Resistance	Junction to Case	R <sub>θJ-C</sub>	°C/W	8

## ■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS5U50PAQ SS5U60PAQ	F1	Approximate 0.106	5000	10000	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 SS5U50PA.
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



# SS5U50PAQ THRU SS5U60PAQ

## ■ Characteristics (Typical)

FIG.1:  $I_o$ - $T_c$  Curve

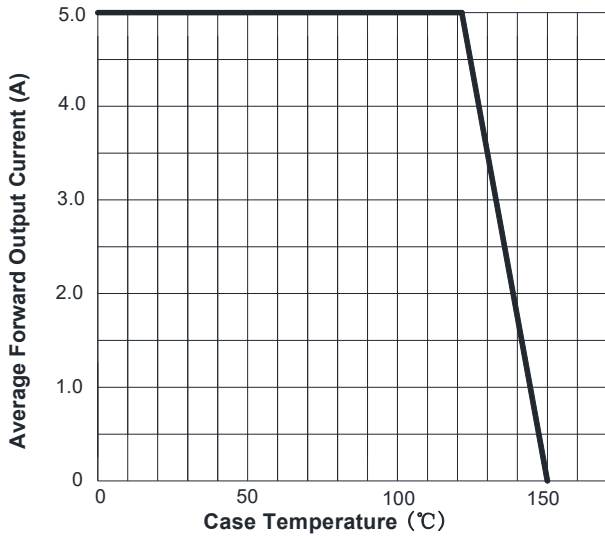


FIG.2: Forward Surge Current Capability

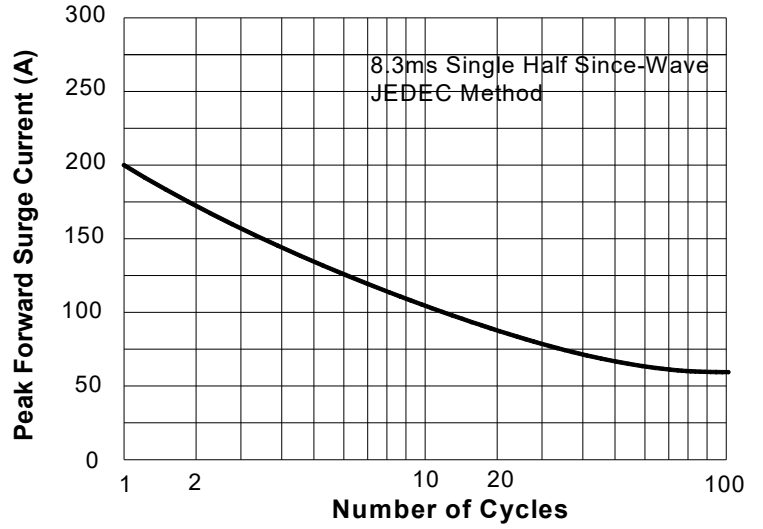


FIG3: Forward Voltage

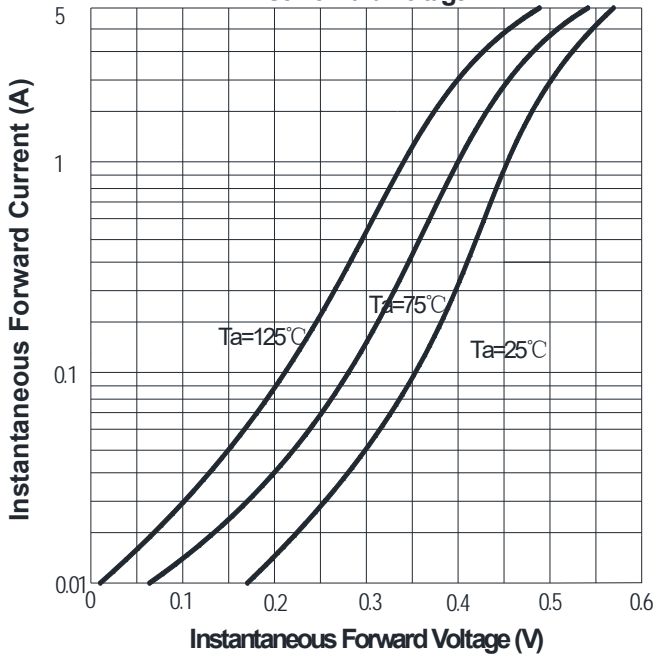
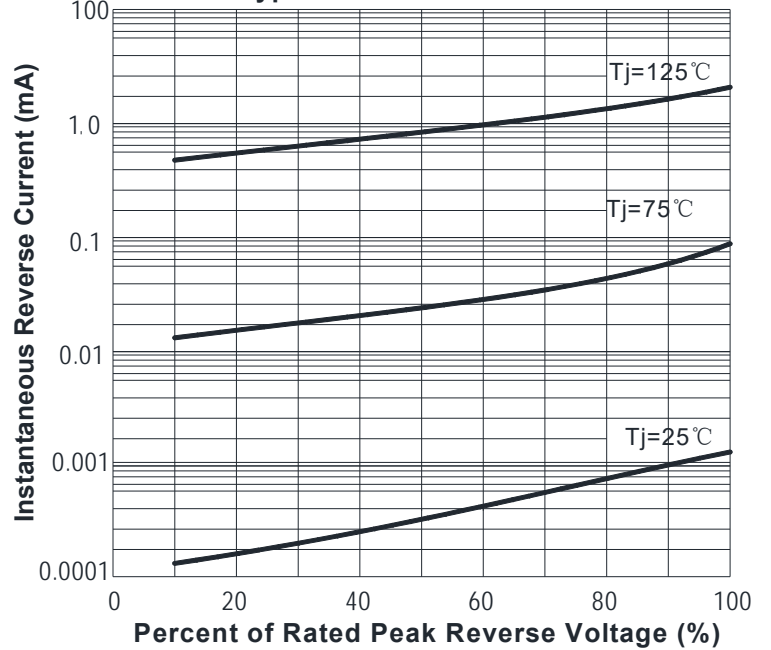


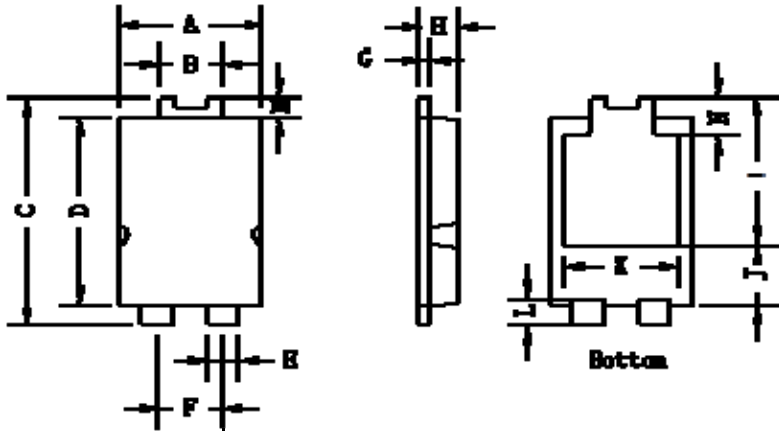
FIG.4: Typical Reverse Characteristics





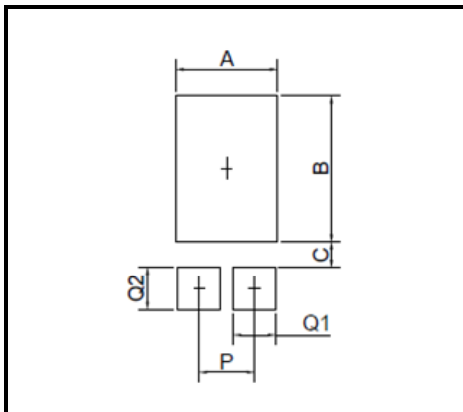
# SS5U50PAQ THRU SS5U60PAQ

## ■ 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



## SS5U50PAQ THRU SS5U60PAQ

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