



## Schottky Rectifier

### Features

- Ideal for automated placement
- Low power losses

Meets MSL level1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

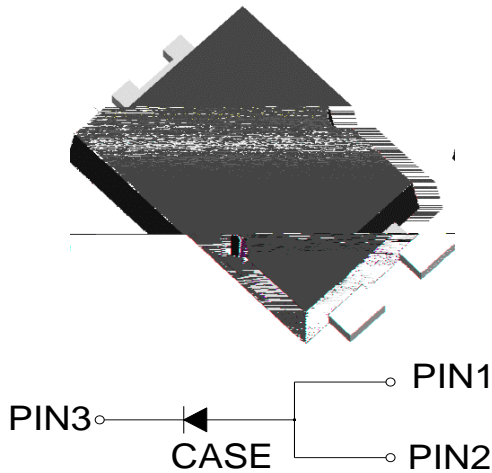
For use in lighting, fast switching rectification of power suppliers, inverters, converters, and freewheeling diodes for consumer, automotive, and telecommunication.

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

PARAMETER	SYMBOL	UNIT	SS15U100P
Device marking code			SS15U100P
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	100
Average Rectified Output Current @60Hz -sine wave, R- load, T <sub>c</sub> (FIG.1)	I <sub>O</sub>	A	15
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, T <sub>a</sub> =25	I <sub>FSM</sub>	A	300
Current Squared Time @ j=25	I <sup>2</sup> t	A <sup>2</sup> s	373.5
Storage Temperature	T <sub>stg</sub>		-55 ~+175
Junction Temperature	T <sub>J</sub>		-55 ~+175



# SS15U100P

## Electrical Characteristics ( $T_A=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS		Typ	Max
Instantaneous forward voltage	$V_F$	V	$I_F=15A$	$T_A=25$	0.78	0.88
			$I_F=15A$	$T_A=125$	0.7	0.8
Leakage Current	$I_R$	A	$V_R=100V$	$T_A=25$	-	10
		mA		$T_A=125$	-	20

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

Note2:Pulse test:pulse width 40mS

## Thermal Characteristics ( $T_A=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS15U100P
Typical Thermal Resistance	$R_{-A}$	/W	75
	$R_{-A}$	/W	100 <sup>(1)</sup>
	$R_{-C}$	/W	5

Note

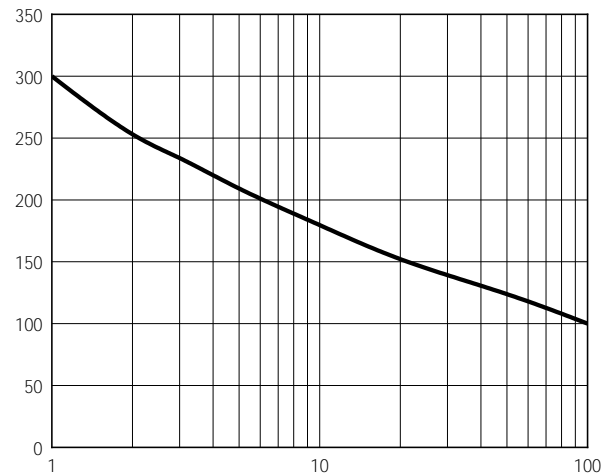
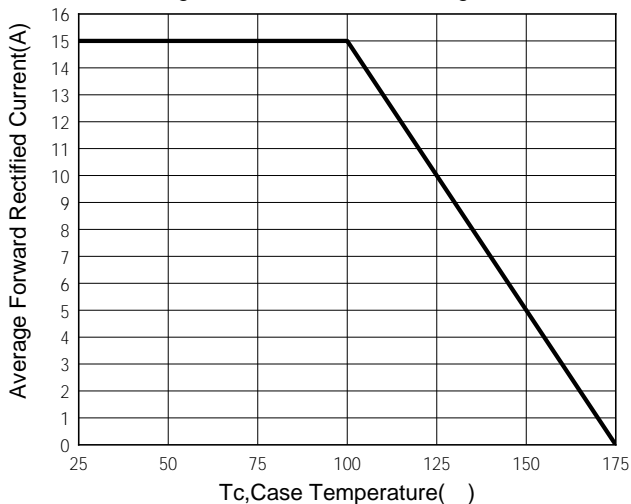
(1) Thermal resistance from junction to ambient mounted on P.C.B. with 10mm\*10mm copper pad areas

## Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS15U100P	F1	Approximate 0.106	5000	80000	

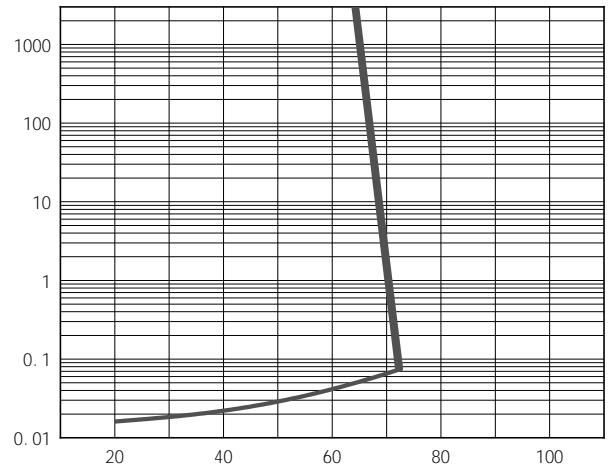
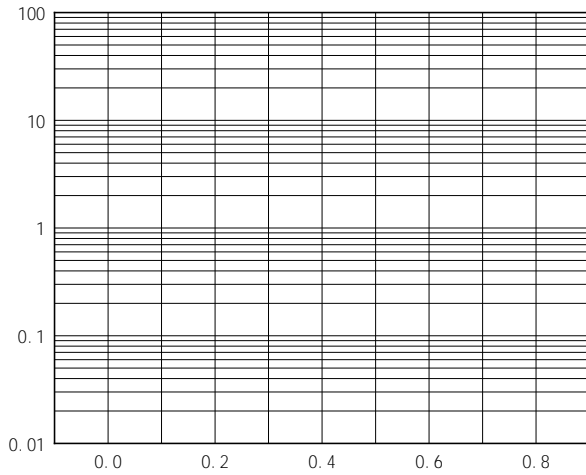
## Characteristics (Typical)

Fig.1:Forward Current Derating Curve

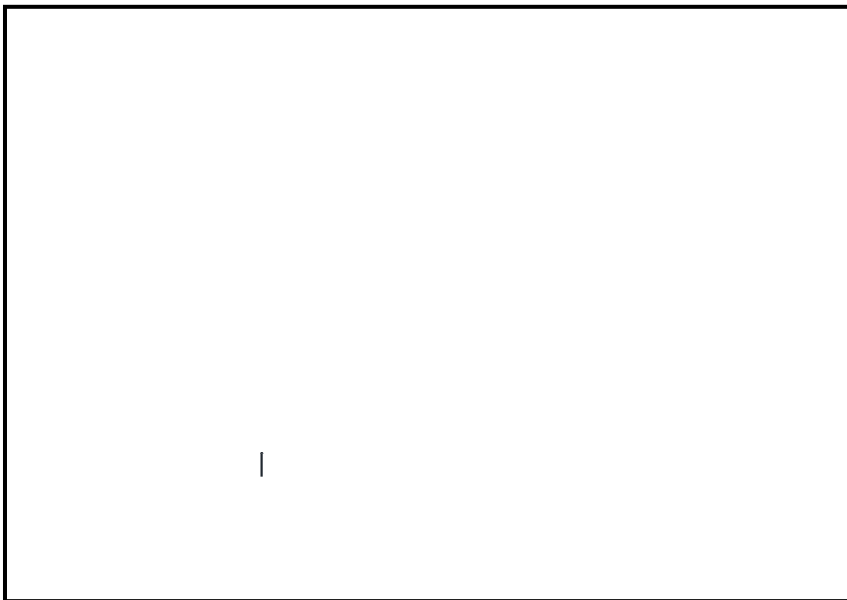




# SS15U100P

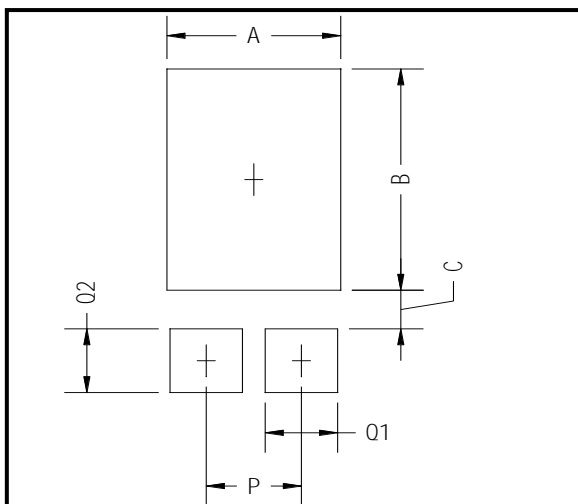


## Outline Dimensions



TO-277		
Dim	Min(mm)	Max(mm)
A	3.9	4.1
B	1.7	1.9
C	6.4	6.6
D	5.3	5.5
E	0.8	1.0
F	1.8	1.9
G	0.35	0.45
H	1.10	1.20
I	4.1	4.5
J	1.5	1.9
K	2.9	3.4
L	0.55	0.7

## Suggested pad layout



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



## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, lifesaving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such