

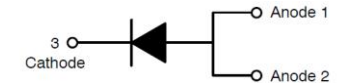
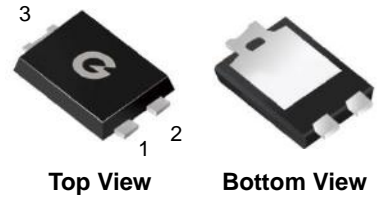
# Schottky Barrier Rectifier

## D3PS100L

### Features

- Metal silicon junction, majority carrier conduction
- High forward surge current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C @ 10s
- Robust guarding for over voltage protection
- RoHS compliant with Halogen-free

HF



### Mechanical Data

- Case: TO-277B molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL- STD-202, Method 208

### Maximum Ratings (@ T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	D3PS100L	Unit
Peak Repetitive Reverse Voltage	V <sub>R</sub> RM	100	V
RMS Reverse Voltage	V <sub>R</sub> MS	70	V
DC Blocking Voltage	V <sub>D</sub> C	100	V
Average Forward Output Current	I <sub>F</sub> AV	3.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I <sub>F</sub> SM	100	A

### Thermal Characteristics

Parameter	Symbol	D3PS100L	Unit
Typical Thermal Resistance *1	R <sub>θ</sub> JA	60	°C/W
	R <sub>θ</sub> JC	20	
	R <sub>θ</sub> JL	15	
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

Note \*1: Device mounted on p.c.b. with 10 mm x 20 mm x 0.1 mm copper pad area

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**D3PS100L**

## Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions		Typ.	Max.	Unit
Instantaneous Forward Voltage <sup>*1</sup>	$V_F$	$I_F = 3.0\text{A}$	@ $T_A = 25^\circ\text{C}$	-	0.65	V
Reverse Current <sup>*2</sup>	$I_R$	Rated $V_R$	@ $T_J = 25^\circ\text{C}$	-	150	$\mu\text{A}$
			@ $T_J = 100^\circ\text{C}$	-	10	mA

Note<sup>\*1</sup>: Pulse test: 300us pulse width, 1 % duty cycle

Note<sup>\*2</sup>: Pulse test: Pulse width 40ms

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## Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

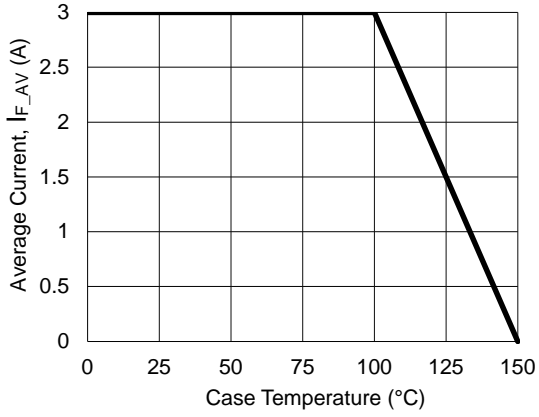


Fig.2 Surge Current Derating Curve

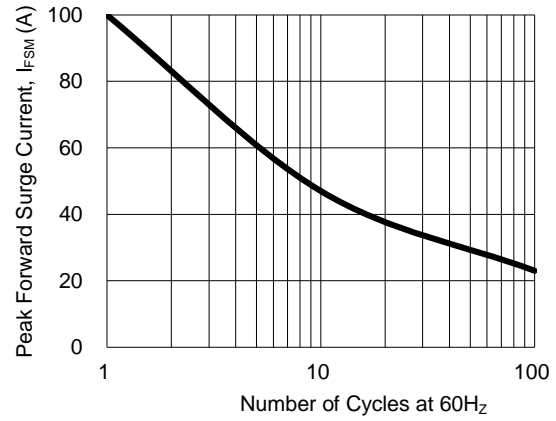


Fig.3 Typical Forward Voltage Characteristics

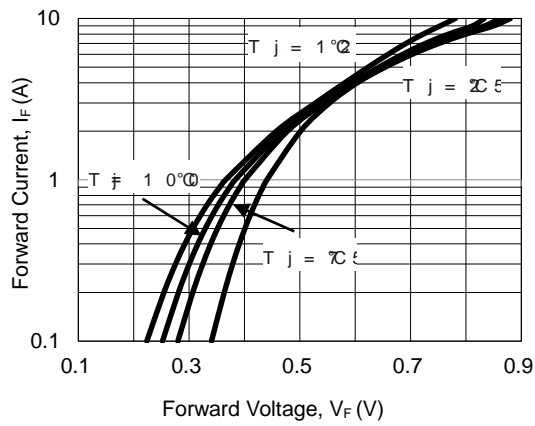
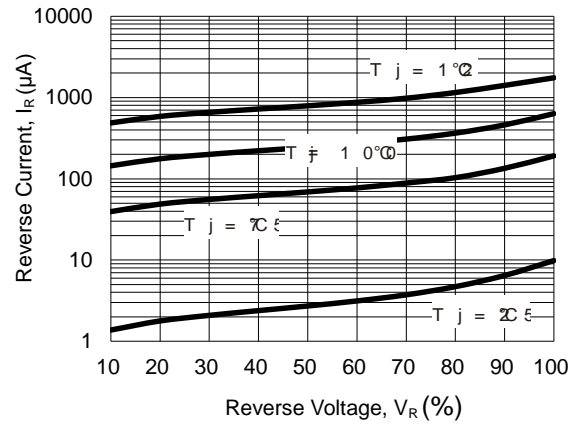


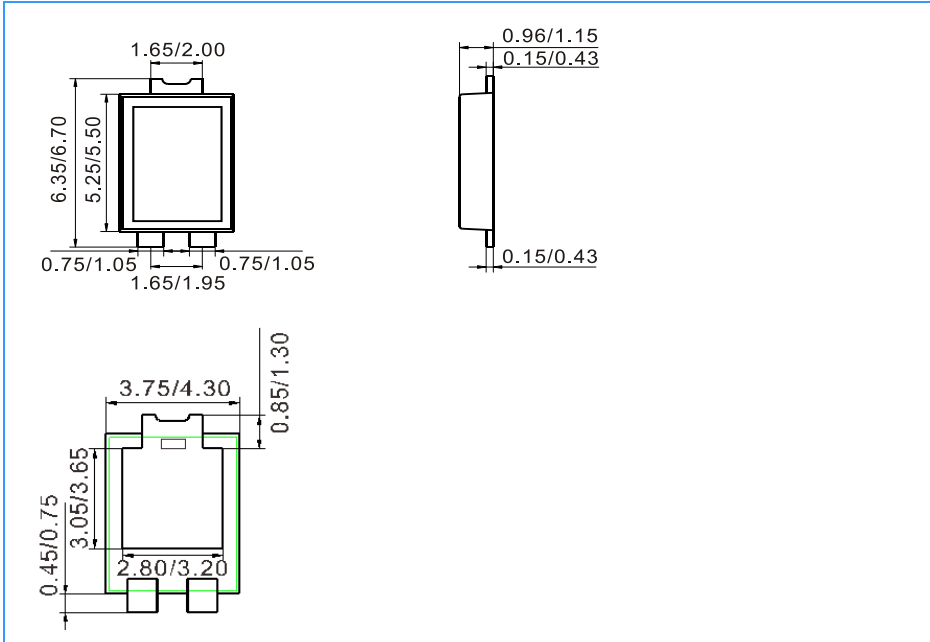
Fig.4 Typical Reverse Characteristics



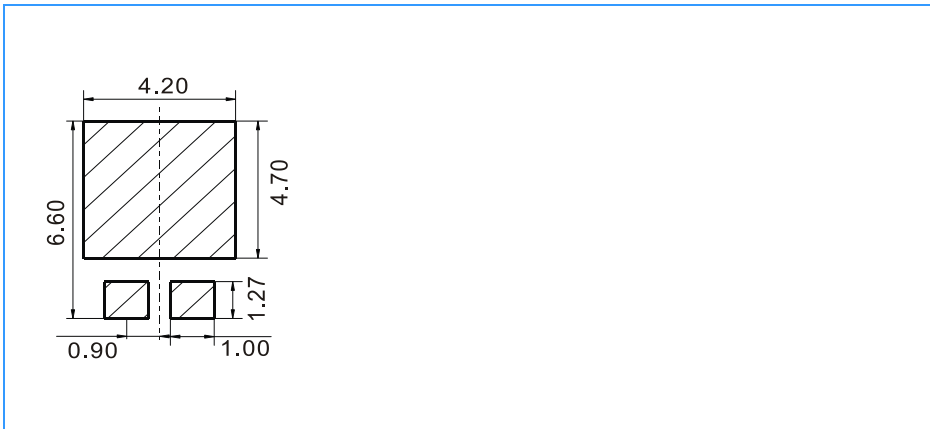
# Schottky Barrier Rectifier

D3PS100L

## Package Outline Dimensions (Unit: mm)



## Mounting Pad Layout (Unit: mm)



## Ordering Information

Part Number	Marking	Package	Shipping Quantity
D3PS100L	D3SAL	TO-277B	4000 pcs / Tape & Reel