

## SANYO Semiconductors DATA SHEET

# **SB01-15CP**

### Schottky Barrier Diode 150V, 100mA Rectifier

#### Applications

• High frequency rectification (switching regulators, converters, choppers). DZSC.COM

#### **Features**

SAN

- Low forward voltage (V<sub>F</sub> max=0.75V).
- Fast reverse recorvery time (trr max=10ns).
- Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

#### **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		150	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		155	V
Average Output Current	lo		100	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

#### Electrical Characteristics at Ta=25°C

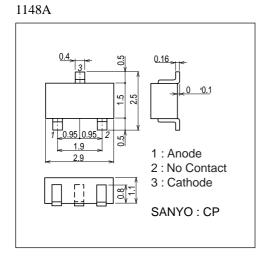
Symbol	Conditions	Ratings			Unit
Symbol		min	typ	max	Unit
VR	I <sub>R</sub> =200μA	150			V
VF	IF=100mA			0.75	V
IR	V <sub>R</sub> =75V			50	μΑ
С	V <sub>R</sub> =10V, f=1MHz		7		pF
trr	IF=IR=100mA, See specified Test Circuit.			10	ns
Rthj-a(1)			420		°C / W
Rthj-a(2)	Mounted on Cu-foild area of 16mm <sup>2</sup> X0.2mm t on glass epoxy board	1.0	330	TOY	°C/W
	VF IR C trr Rthj-a(1)	VR IR=200μA   VF IF=100mA   IR VR=75V   C VR=10V, f=1MHz   trr IF=IR=100mA, See specified Test Circuit.   Rthj-a(1) Mounted on Cu-foild area of 16mm²X0.2mm t	VR IR=200μA 150   VF IF=100mA 150   IR VR=75V 0   C VR=10V, f=1MHz 1   trr IF=IR=100mA, See specified Test Circuit. 1   Rthj-a(1) Mounted on Cu-foild area of 16mm²X0.2mm t 1	Symbol Conditions min typ   VR IR=200µA 150 150   VF IF=100mA 150 150   IR VR=75V 150 150   C VR=10V, f=1MHz 7 7   trr IF=IR=100mA, See specified Test Circuit. 420   Rthj-a(1) 420 330	$\begin{tabular}{ c c c c c c } \hline Symbol & Conditions & \hline min & typ & max \\ \hline \hline Min & typ & max \\ \hline Min & typ & max \\ \hline 150 & \hline & 0.75 & \hline & IF=100mA & 0.75 & \hline & 0.75 & \hline & 0 & V_R=75V & \hline & 0 & 50 & \hline & C & V_R=10V, f=1MHz & 7 & \hline & 100 & \hline & trr & IF=IR=100mA, See specified Test Circuit. & 10 & 100 & \hline & Rthj-a(1) & & 420 & \hline & Rthj-a(2) & Mounted on Cu-foild area of 16mm2X0.2mm t & 330 & \hline & 330 & \hline & 0 & \hline & 0 & \hline & 0 & 0 & \hline & 0 & 0$

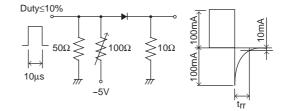
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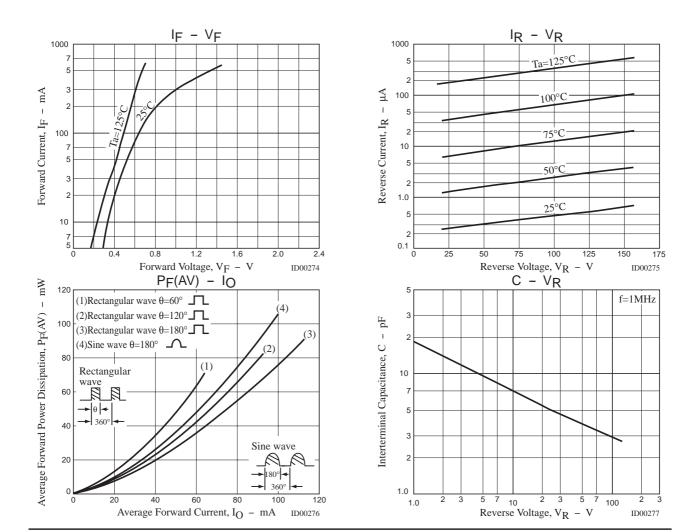
#### Package Dimensions

unit : mm

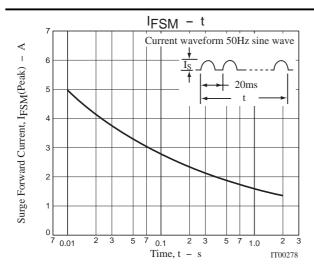
#### trr Test Circuit







#### SB01-15CP



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