

# SANYO Semiconductors DATA SHEET

# SBJ100-04J Schottky Barrier Diode (Twin Type · Cathode Common) 40V, 10A Rectifier

# **Applications**

· High frequency rectification (switching regulators, converters, choppers).

#### **Features**

- Small reverse current (IR typ=5μA) due to adoption of JBS (junction barrier schottky) structure.
- Low forward voltage (VF typ=0.48V).
- High temperature operation is possible (Tj=150°C).
- · High surge breakdown voltage.

# **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		40	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		44	V
Average Output Current	IO	50Hz resistive load, Sine wave Tc=117°C	10	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	100	Α
Junction Temperature	Tj		-55 to +150	°C
Storage Temperature	Tstg		-55 to +150	°C

## Electrical Characteristics at Ta=25°C

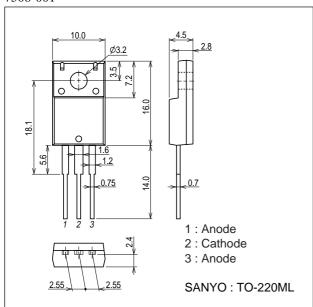
Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Reverse Voltage	VR	I <sub>R</sub> =2mA, Tj=25°C*	40			V
Forward Voltage	VF	I <sub>F</sub> =5A, Tj=25°C*		0.48	0.54	V
Reverse Current	lo.	V <sub>R</sub> =20V, Tj=25°C*		5	50	μΑ
	IR	V <sub>R</sub> =40V, Tj=25°C*		8	100	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, Tj=25°C*		250		pF
Thermal Resistance	Rth(i-c)	Junction-Case : Smoothed DC			4.0	°C/W

Note) \*: Value per element

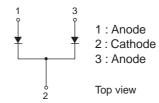
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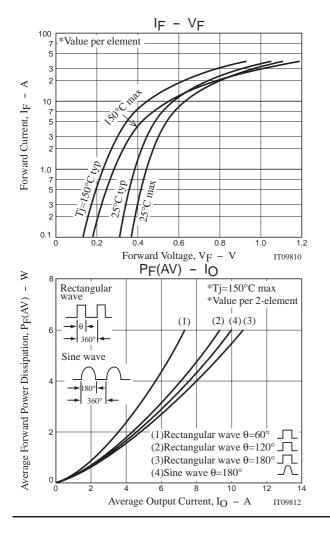
## **Package Dimensions**

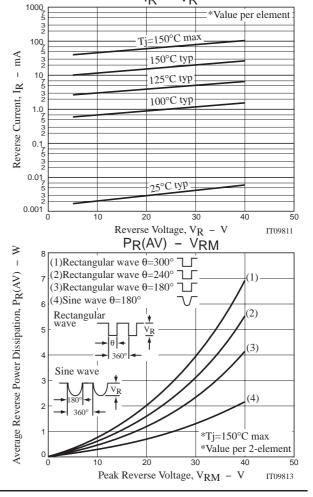
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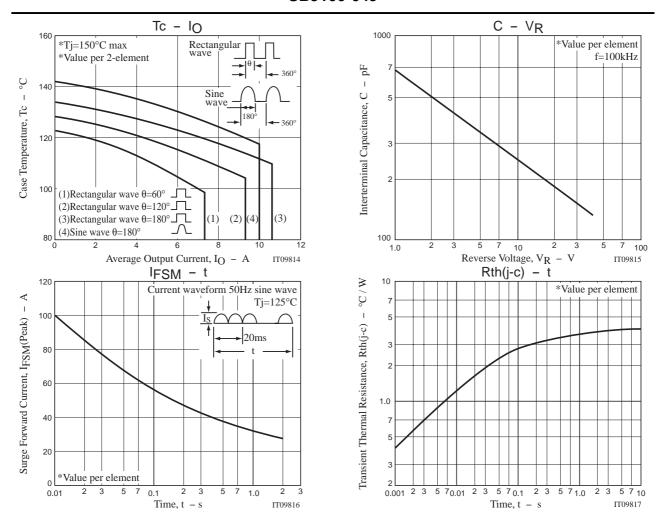
#### **Electrical Connection**







# SBJ100-04J



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