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**SANYO Semiconductors**  
**DATA SHEET**

# **SBT250-04L** — Schottky Barrier Diode (Twin Type · Cathode Common) **40V, 25A Rectifier**

## **Applications**

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

## **Features**

- Guaranteed up to  $T_j=150^\circ\text{C}$ .
- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.

## **Specifications**

### **Absolute Maximum Ratings** at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$			40	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$			44	V
Average Output Current	$I_O$	50Hz resistive load, Sine wave $T_c=121^\circ\text{C}$		25	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle		120	A
Junction Temperature	$T_j$			-55 to +150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$			-55 to +150	$^\circ\text{C}$

### **Electrical Characteristics** at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=3\text{mA}, T_j=25^\circ\text{C}^*$	40			V
Forward Voltage	$V_F$	$I_F=10\text{A}, T_j=25^\circ\text{C}^*$			0.55	V
Reverse Current	$I_R$	$V_R=20\text{V}, T_j=25^\circ\text{C}^*$			0.3	mA
Interterminal Capacitance	C	$V_R=10\text{V}, T_j=25^\circ\text{C}^*$		510		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			1.6	$^\circ\text{C} / \text{W}$

Note) \* : Value per element

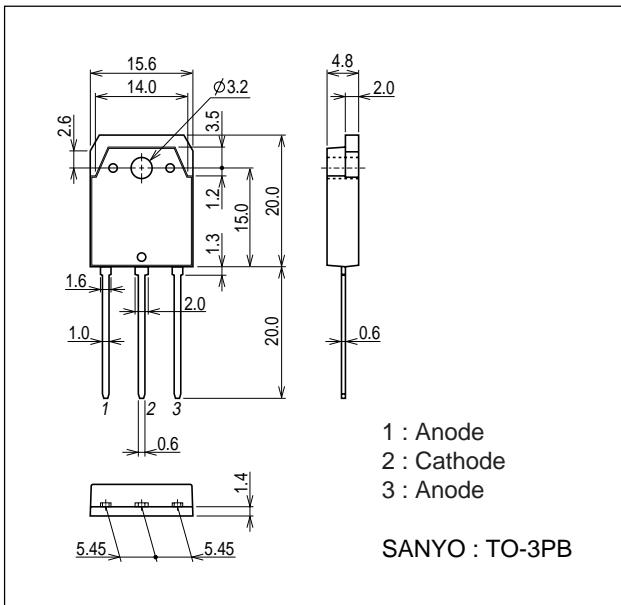
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**SBT250-04L**

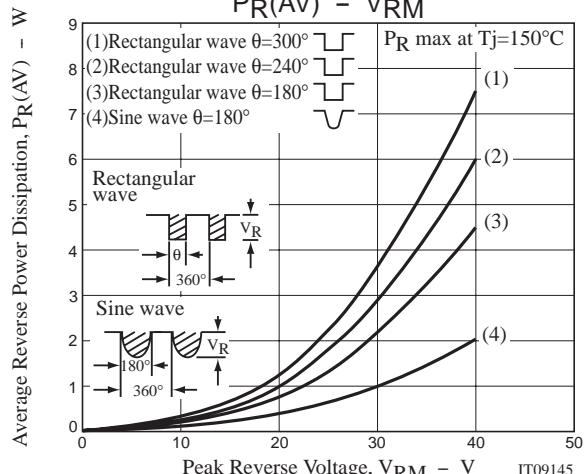
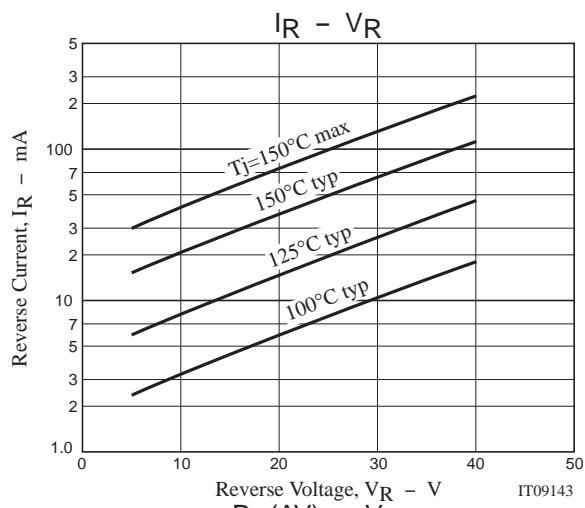
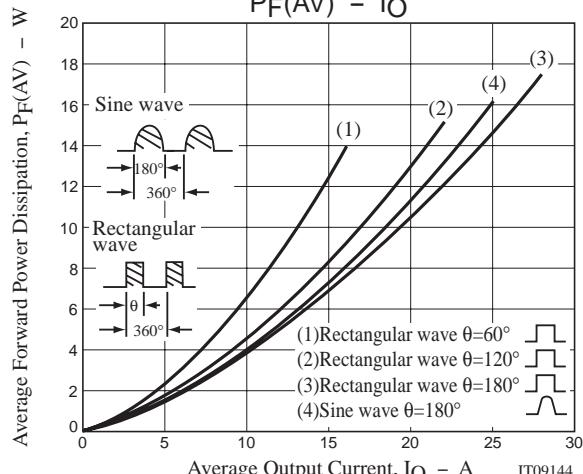
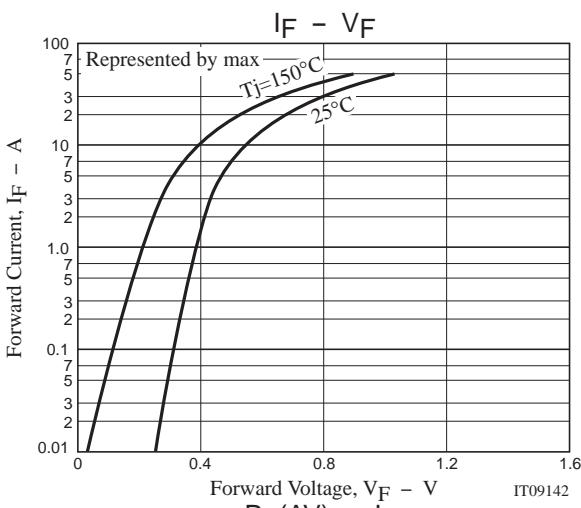
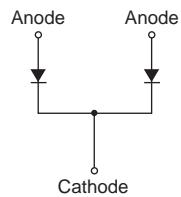
## Package Dimensions

unit : mm

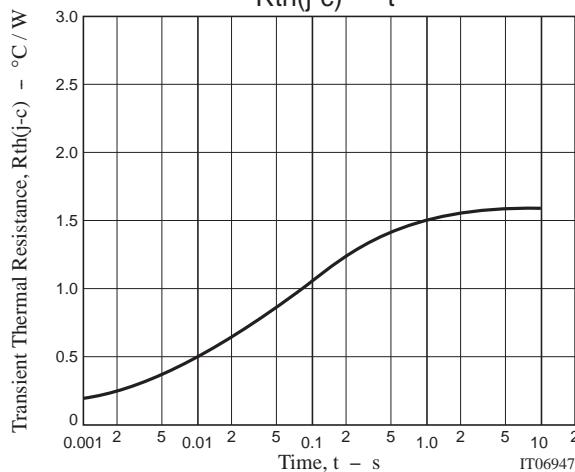
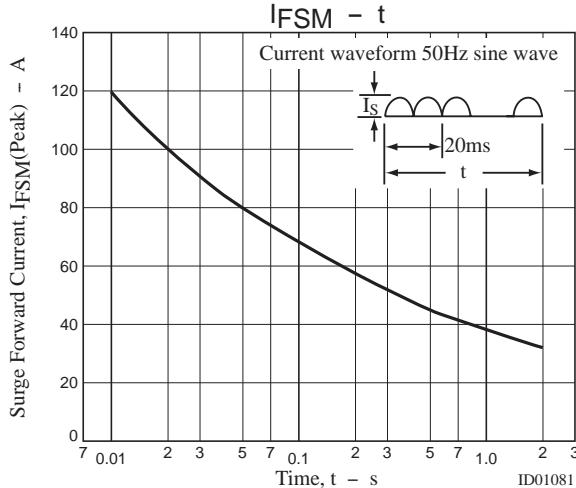
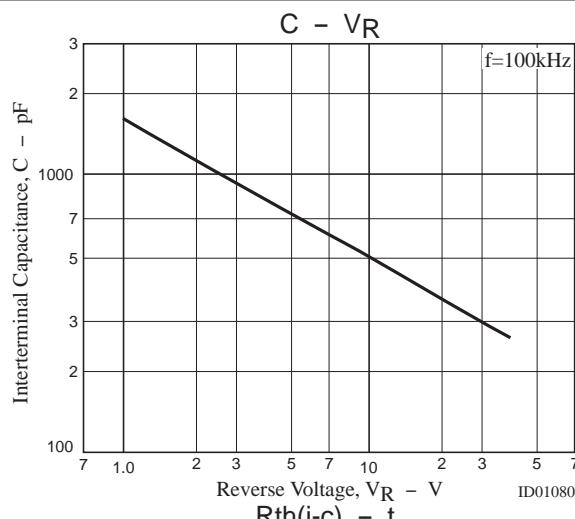
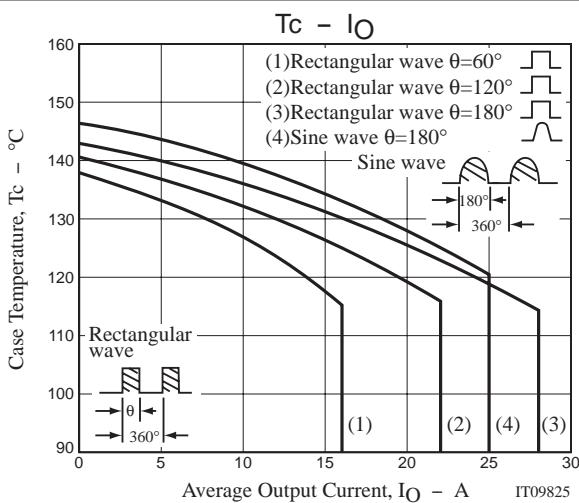
7503-002



## Electrical Connection



## SBT250-04L



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