



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SANYO Semiconductors

## DATA SHEET

# SBT250-04R

 — 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 ( $V_F \text{ max}=0.55\text{V}$ ).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Micaless package facilitating easy mounting.

## 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 $T_c=106^{\circ}\text{C}$	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			2.4	$^{\circ}\text{C} / \text{W}$

Note) \* : Value per element

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- SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

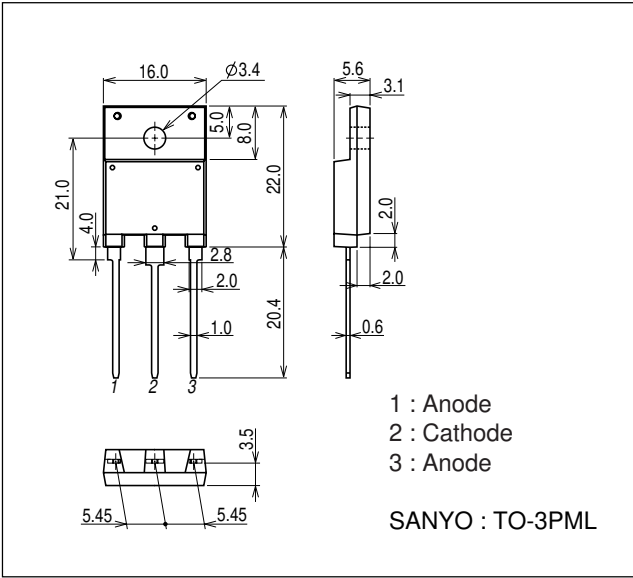
**SANYO Electric Co.,Ltd. Semiconductor Company**

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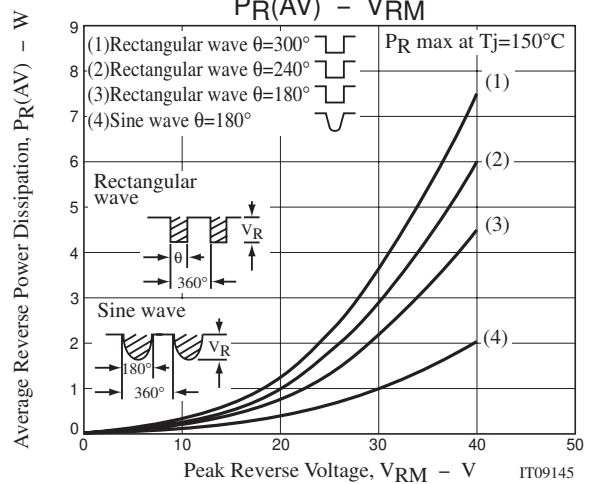
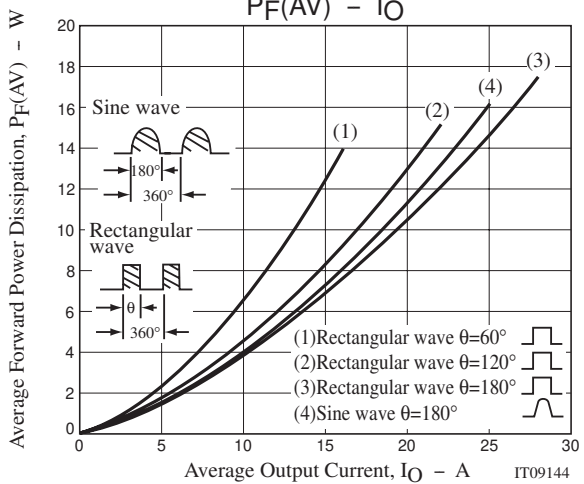
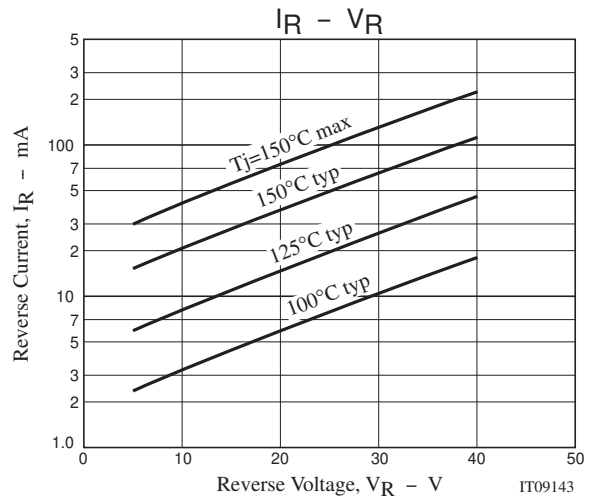
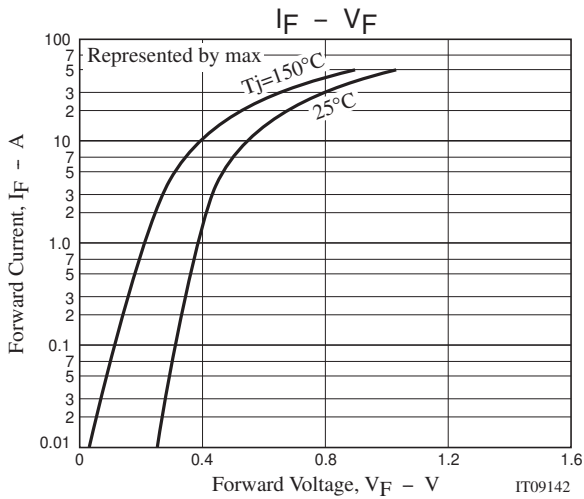
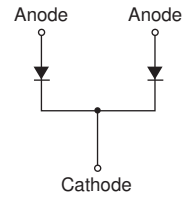
# SBT250-04R

## Package Dimensions

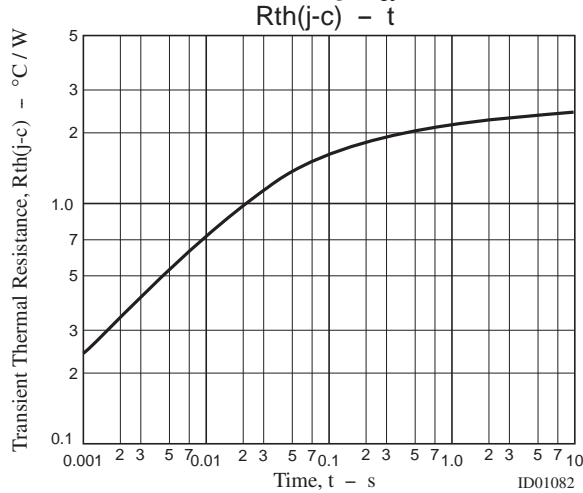
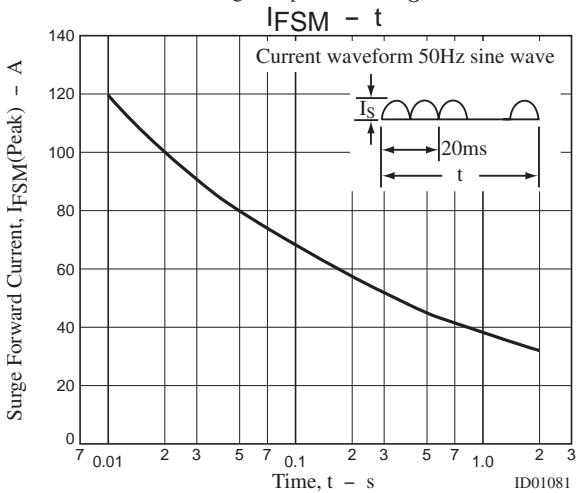
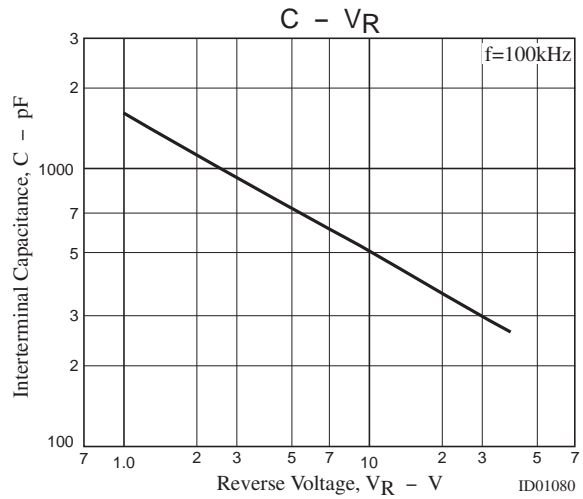
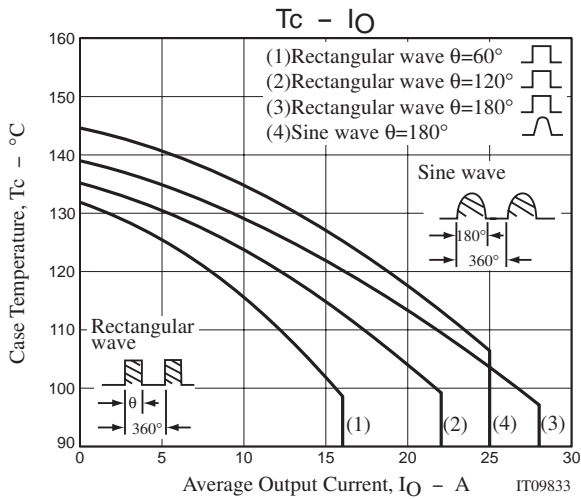
unit : mm  
7505-001



## Electrical Connection







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