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[SBT250-10J](#)

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SANYO Semiconductors **DATA SHEET**

SBT250-10J — Schottky Barrier Diode (Twin Type · Cathode Common) **100V, 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=0.80V).
- Short reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Attachment workability is good by Mica-less package.

Specifications

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

Parameter	Symbol	Conditions	Ratings		Unit
Repetitive Peak Reverse Voltage	V_{RRM}			100	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}			105	V
Average Output Current	I_O	50Hz resistive load, Sine wave $T_c=42^\circ\text{C}$		25	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle		100	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	$I_R=3\text{mA}, T_j=25^\circ\text{C}^*$	100			V
Forward Voltage	V_F	$I_F=9.5\text{A}, T_j=25^\circ\text{C}^*$			0.80	V
Reverse Current	I_R	$V_R=50\text{V}, T_j=25^\circ\text{C}^*$			0.3	mA
Interterminal Capacitance	C	$V_R=10\text{V}, T_j=25^\circ\text{C}^*$		280		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			3.4	$^\circ\text{C} / \text{W}$

Note) * : Value per element

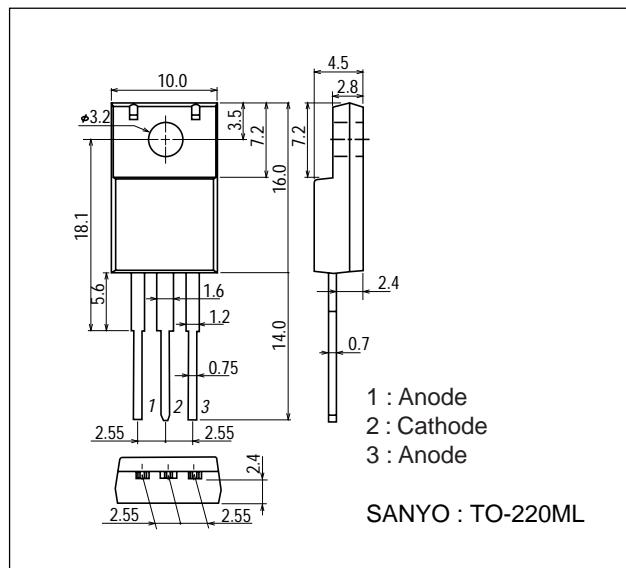
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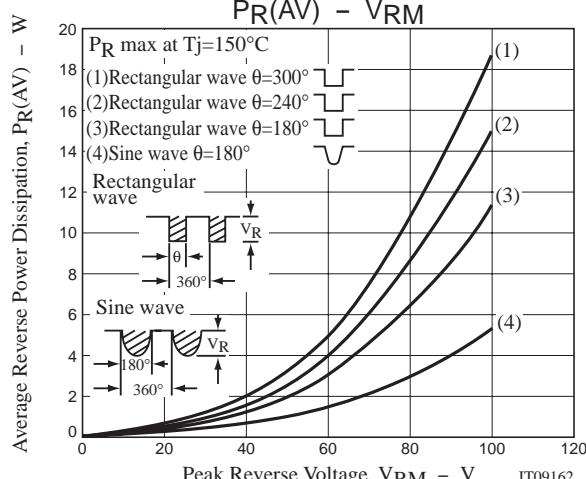
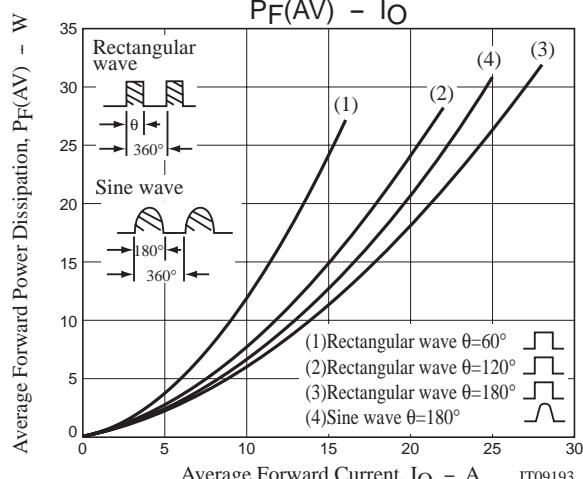
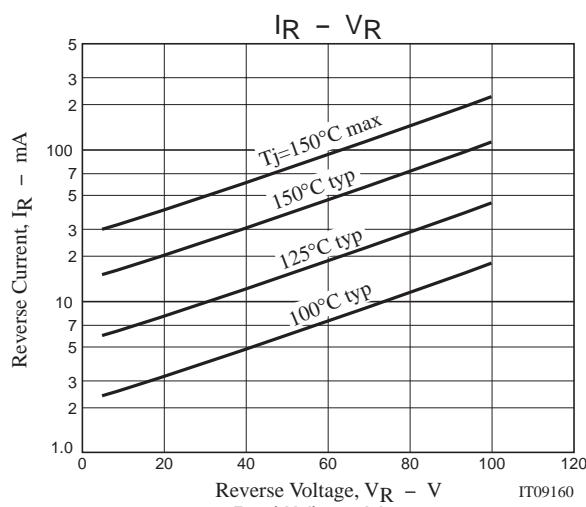
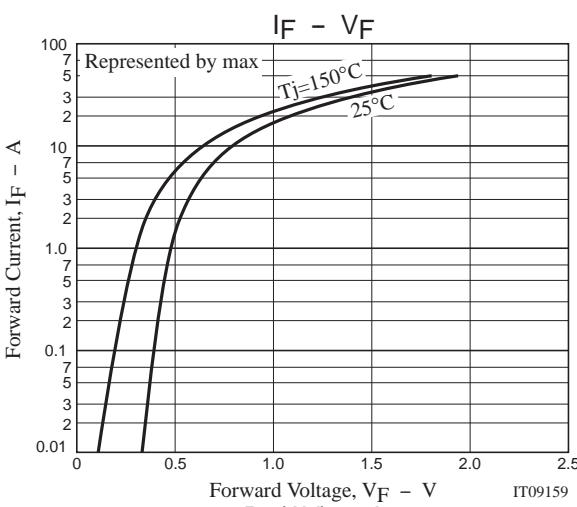
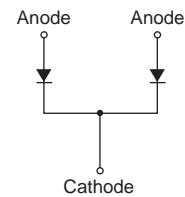
Package Dimensions

unit : mm

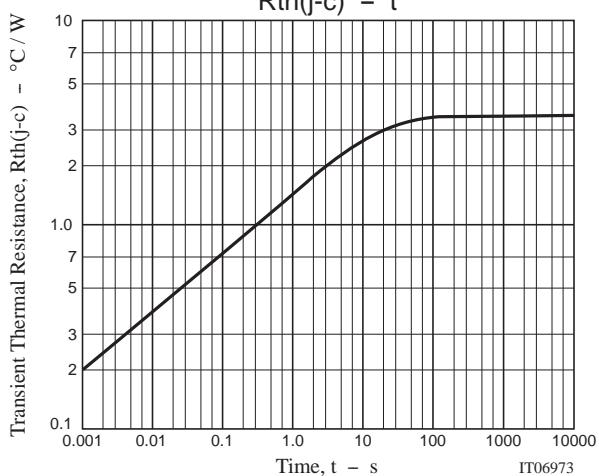
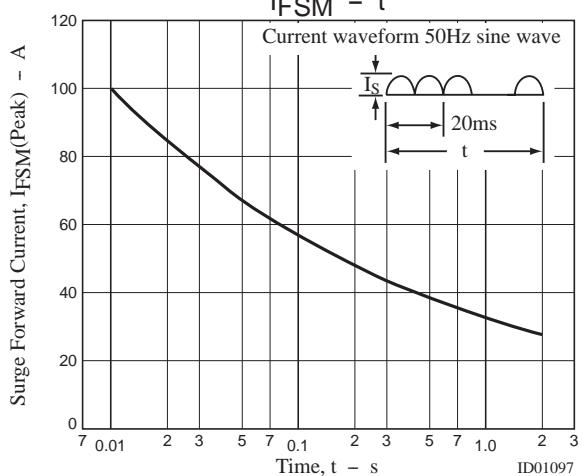
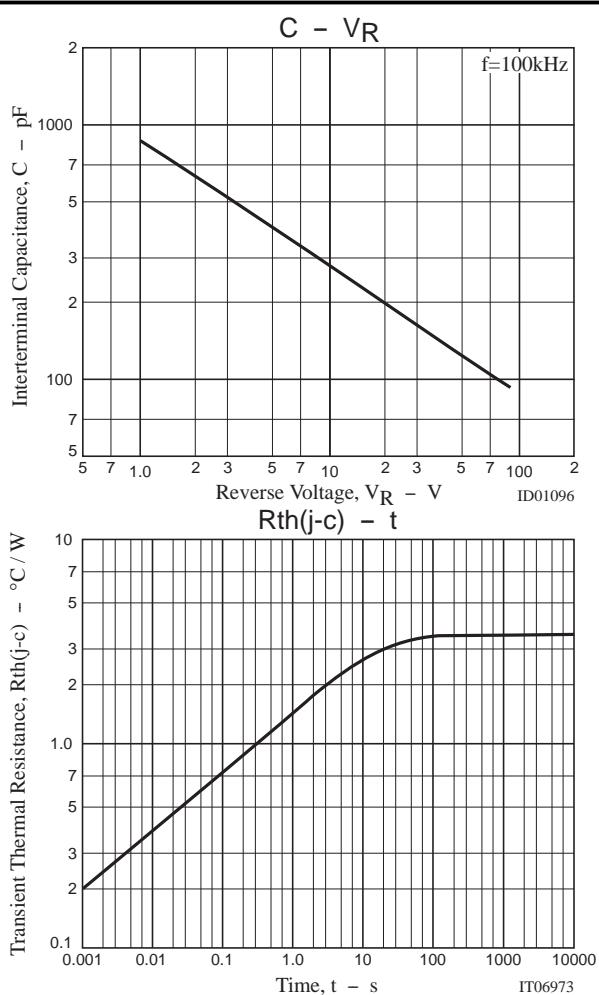
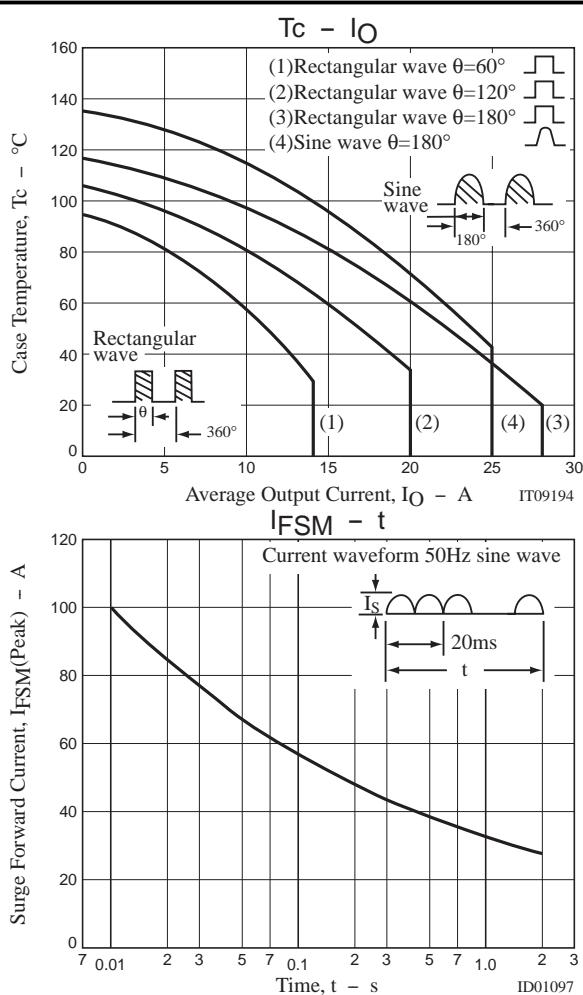
1178A



Electrical Connection



SBT250-10J



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