



SANYO Semiconductors

DATA SHEET

SBJ200-04J — Schottky Barrier Diode (Twin Type · Cathode Common)

40V, 20A Rectifier

Applications

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

Features

- Small reverse current (I_R typ=10 μ A) due to adoption of MRJ (Multi Refined PN Junction) structure.
- Low forward voltage (V_F typ=0.48V).
- High temperature operation is possible (T_J =150°C).
- High surge breakdown voltage.

Specifications

Absolute Maximum Ratings at T_a =25°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 =95°C	20	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	120	A
Junction Temperature	T_J		-55 to +150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at T_a =25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R =2mA, T_J =25°C*	40			V
Forward Voltage	V_F	I_F =10A, T_J =25°C*		0.48	0.54	V
Reverse Current	I_R	V_R =20V, T_J =25°C*		10	100	μ A
		V_R =40V, T_J =25°C*		20	200	μ A
Interterminal Capacitance	C	V_R =10V, T_J =25°C*		510		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			3.2	°C / W

Note) *: Value per element

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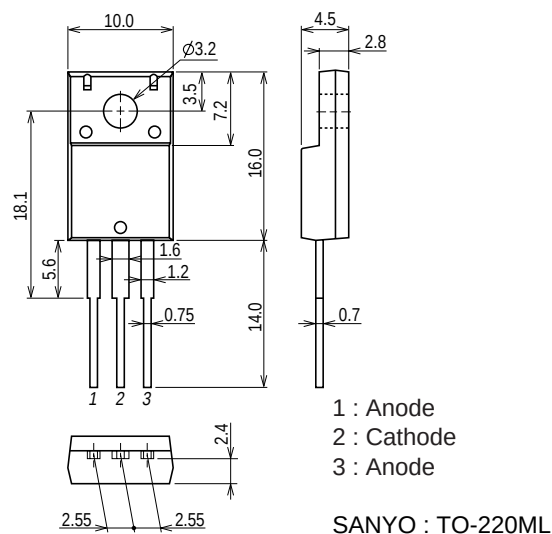
SANYO Electric Co.,Ltd. Semiconductor Company

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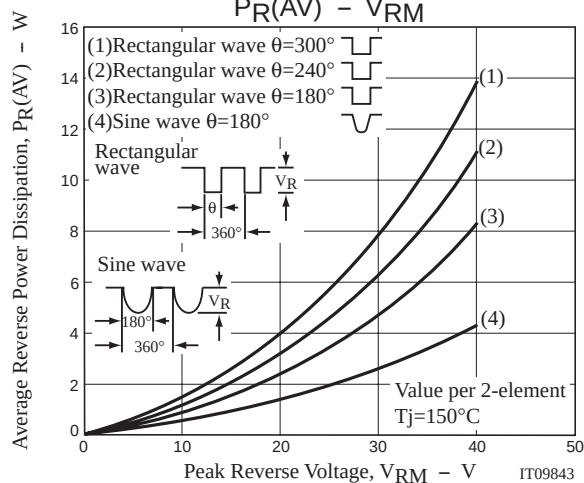
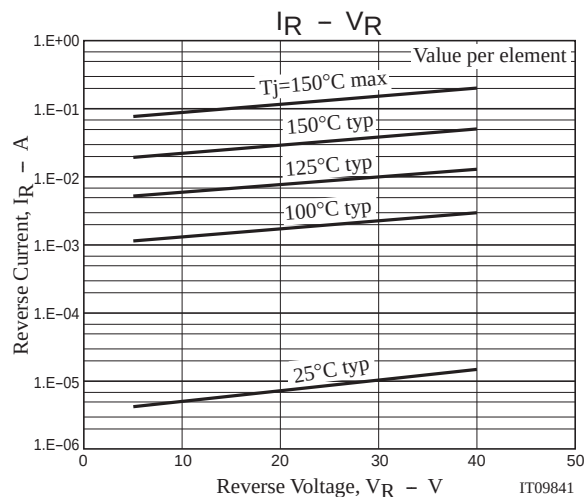
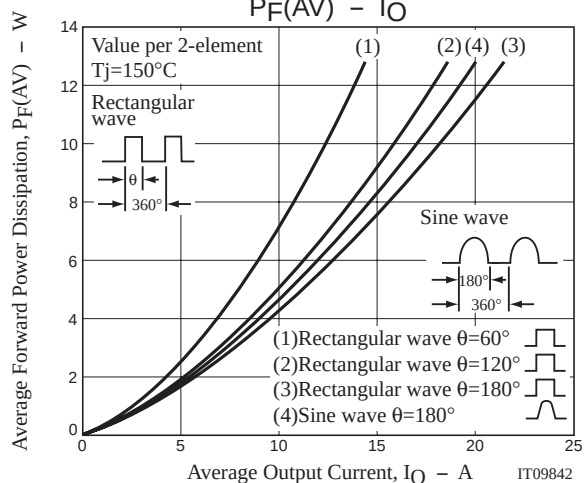
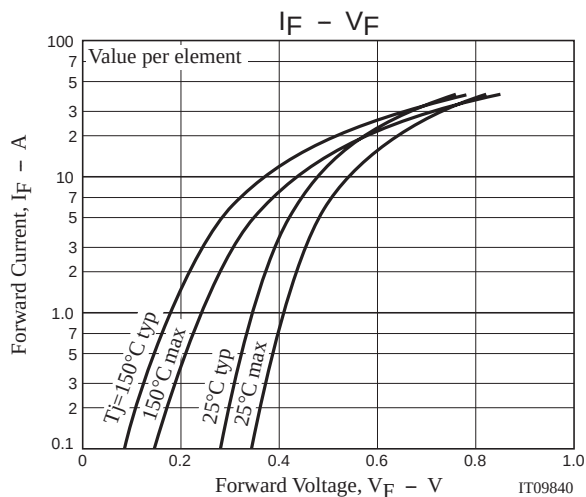
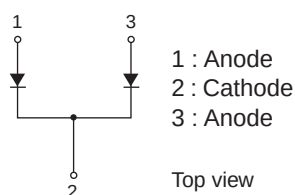
Package Dimensions

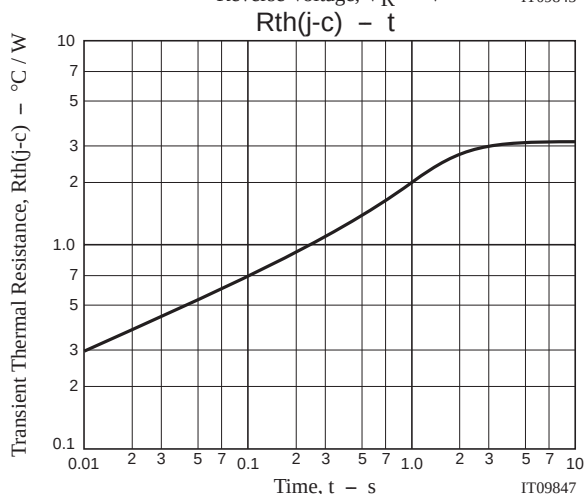
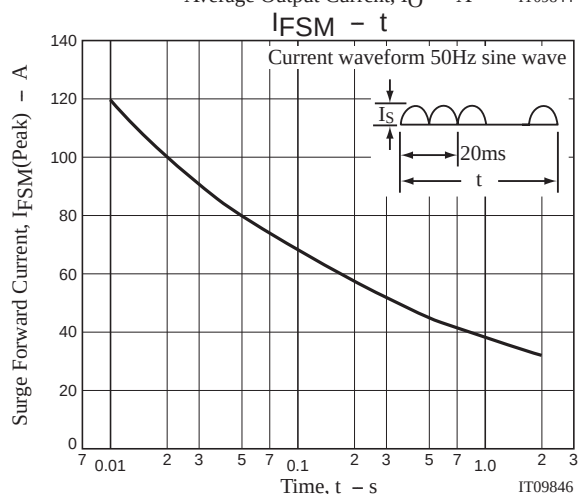
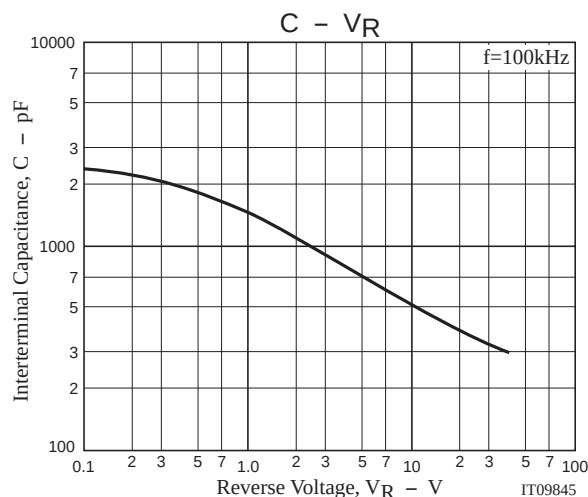
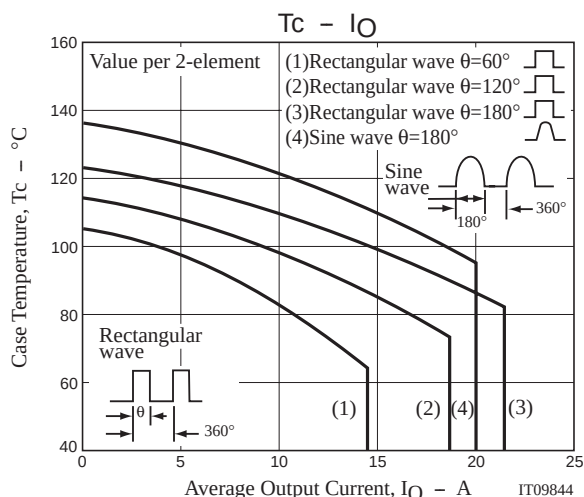
unit : mm

7508-001



Electrical Connection





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