



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 $T_a=25^\circ\text{C}$

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 $T_c=95^\circ\text{C}$	20	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	$I_R=2\text{mA}$, $T_J=25^\circ\text{C}^*$	40			V
Forward Voltage	V_F	$I_F=10\text{A}$, $T_J=25^\circ\text{C}^*$		0.48	0.54	V
Reverse Current	I_R	$V_R=20\text{V}$, $T_J=25^\circ\text{C}^*$		10	100	μA
		$V_R=40\text{V}$, $T_J=25^\circ\text{C}^*$		20	200	μA
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			3.2	$^\circ\text{C}/\text{W}$

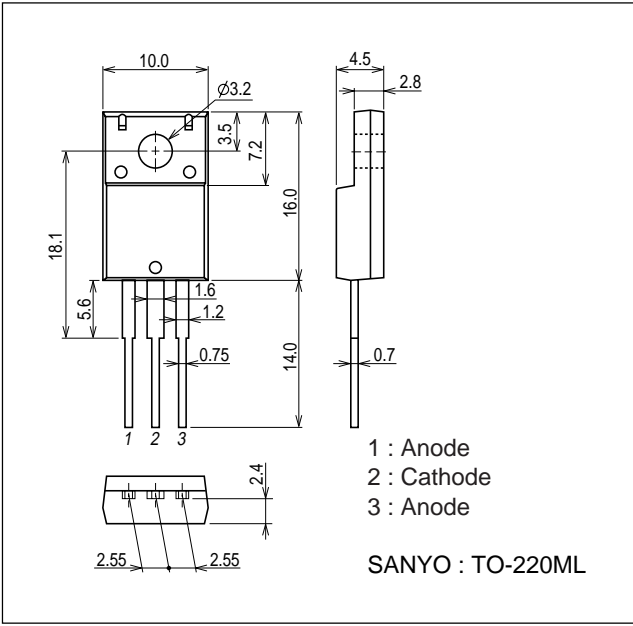
Note) * : Value per element

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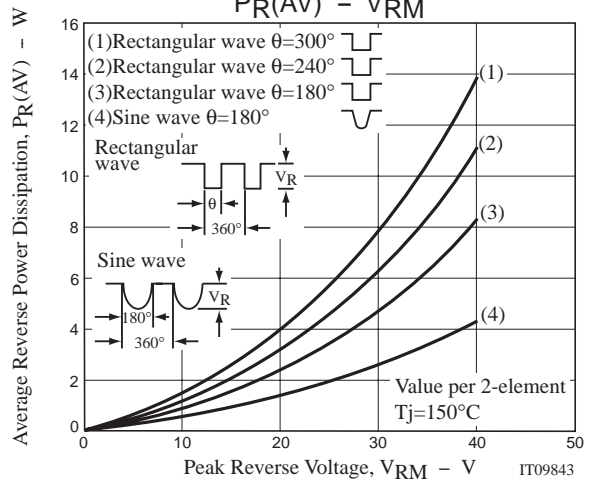
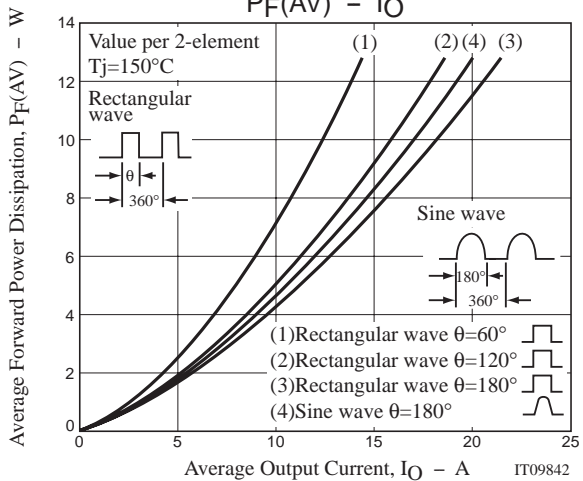
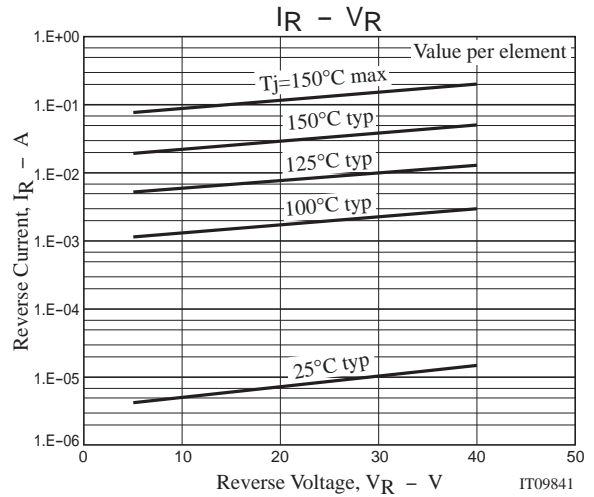
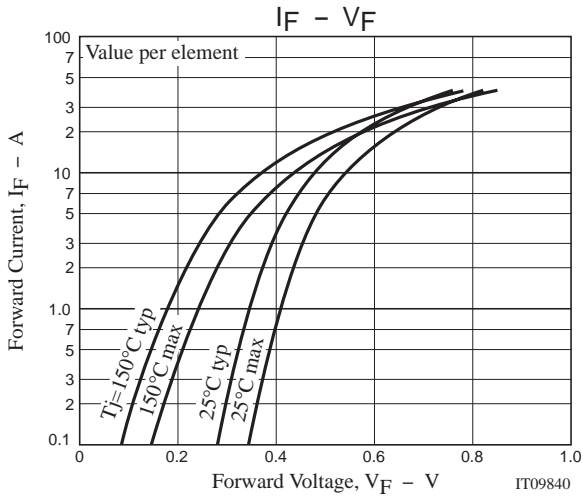
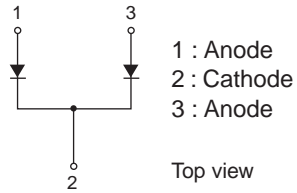
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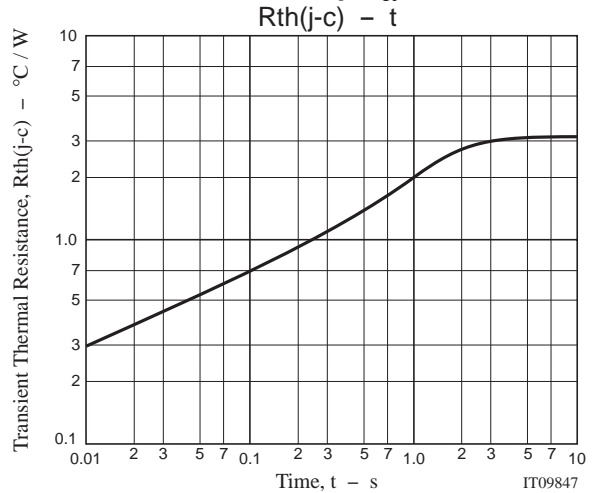
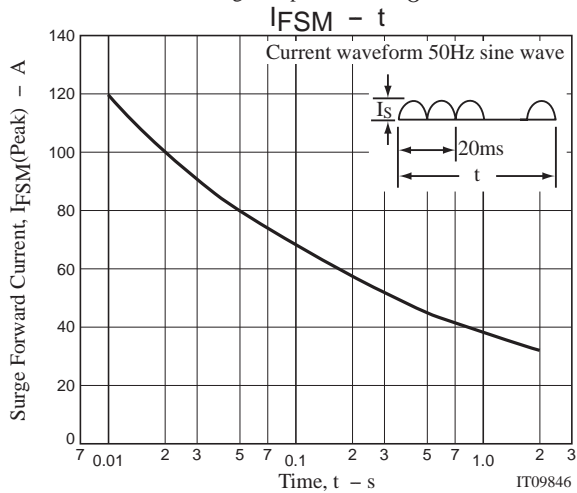
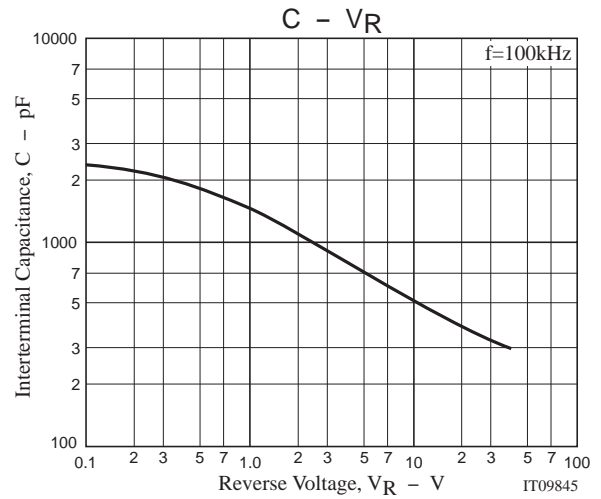
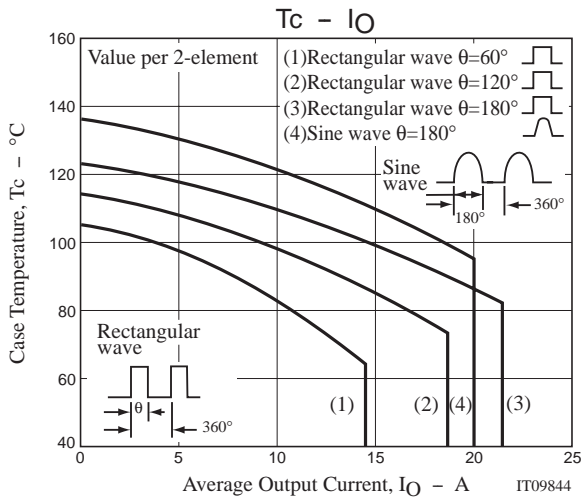
Package Dimensions

unit : mm
7508-001



Electrical Connection





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