



SBA100-04Y

Schottky Barrier Diode (Twin Type · Cathode Common)

40V, 10A Rectifier

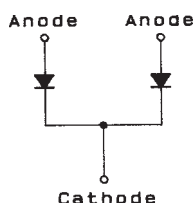
Applications

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

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time.
- Low switching noise.
- High reliability due to highly reliable planar structure.
- Surface mount type device reducing the assembling time and facilitating compact and high-density assembly of SBA100-09Y-applied equipment.

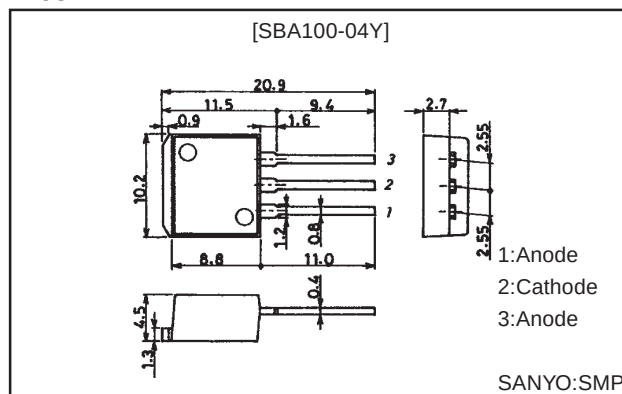
Electrical Connection



Package Dimensions

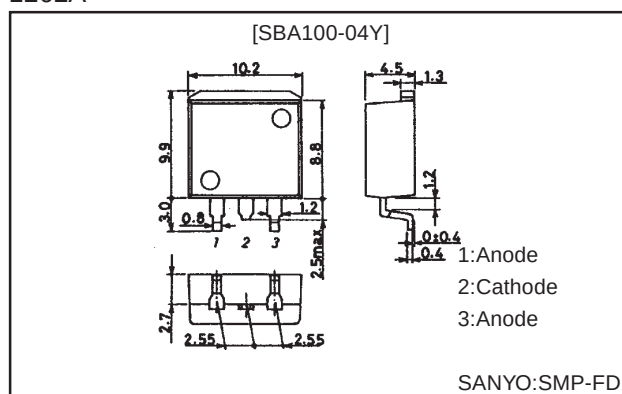
unit:mm

1258A



unit:mm

1262A



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, $T_c=101^\circ\text{C}$	10	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	100	A
Junction Temperature	T_j		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics

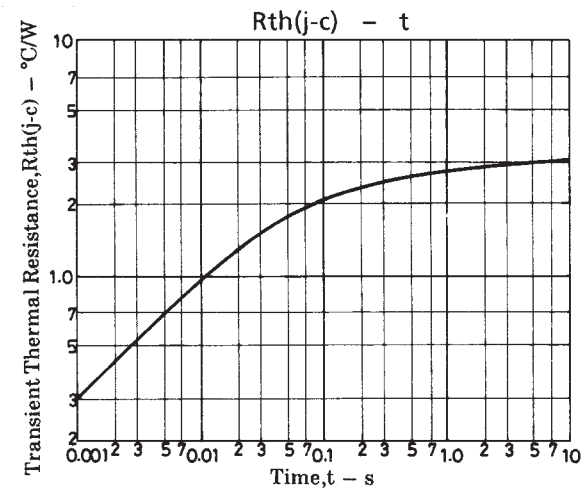
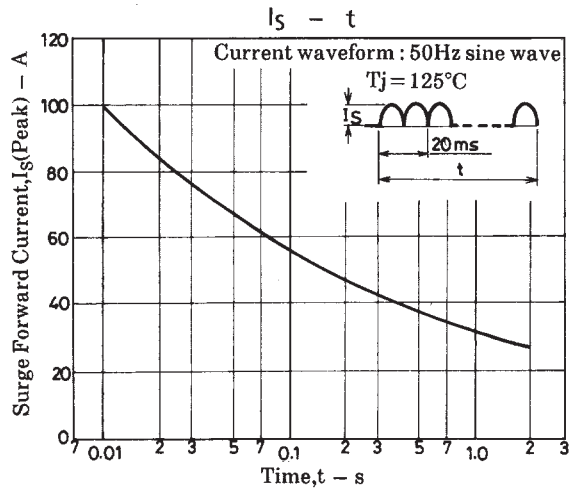
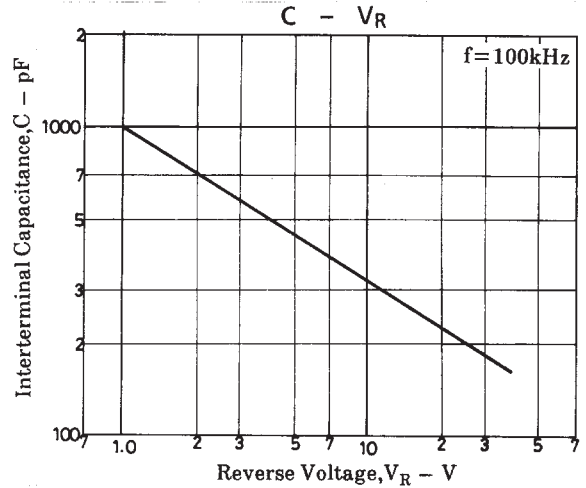
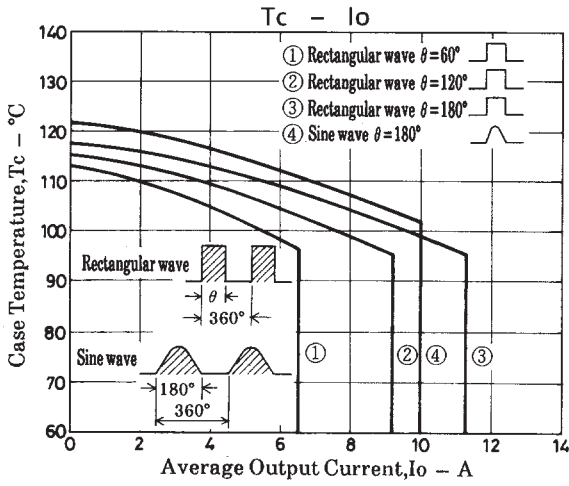
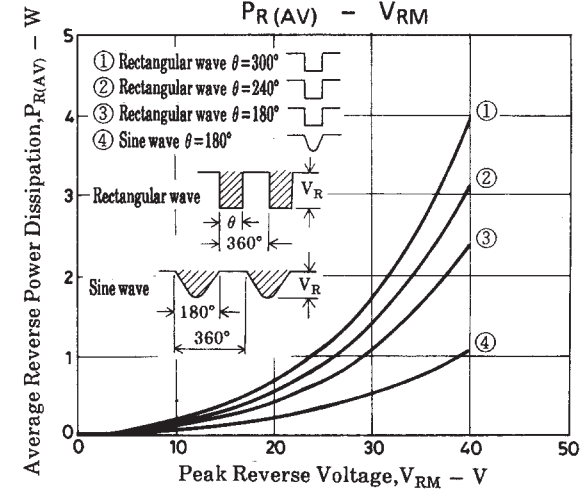
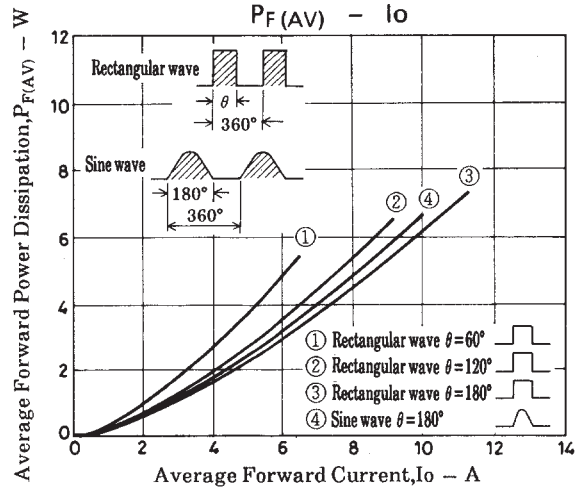
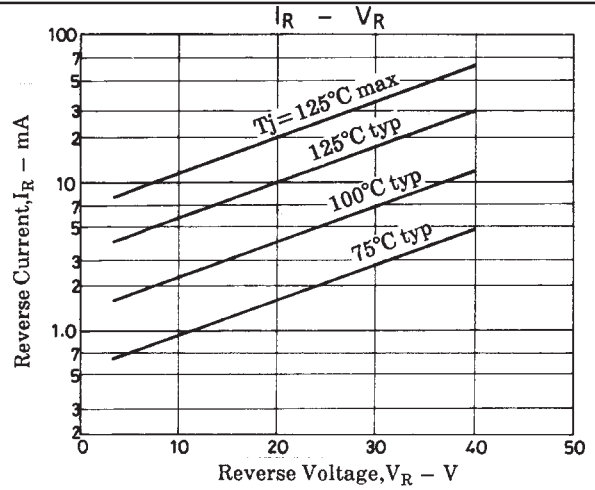
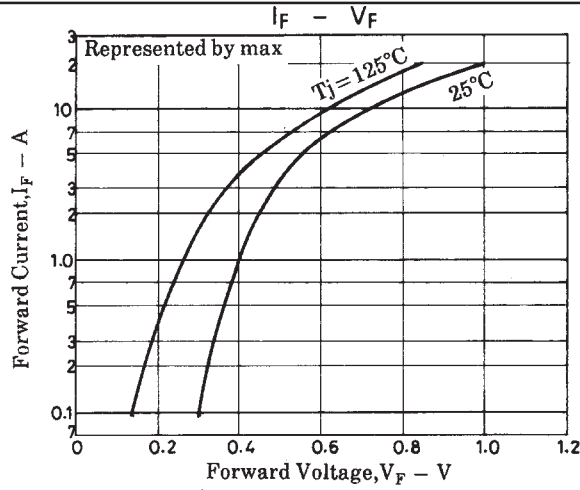
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=2\text{mA}$, $T_j=25^\circ\text{C}$, *	40			V
Forward Voltage	V_F	$I_F=5\text{A}$, $T_j=25^\circ\text{C}$, *			0.55	V
Reverse Current	I_R	$V_R=20\text{V}$, $T_j=25^\circ\text{C}$, *			0.2	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $T_j=25^\circ\text{C}$, *		320		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case:Smoothed DC			3.0	$^\circ\text{C/W}$

Note*:Value per element

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