

SANYO	No.4176	SB20-05P
		Schottky Barrier Diode
50V, 2A Rectifier		

Applications

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

Features

- Low forward voltage (V_F max = 0.55V).
- Fast reverse recovery time (t_{rr} max = 20ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

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

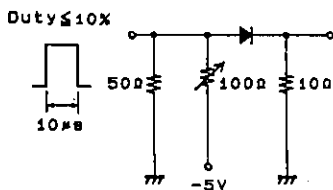
			unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	V
[Non-repetitive Peak	V_{RSM}	55	V
Reverse Surge Voltage			
Average Output Current	I_o	2	A
Surge Forward Current	I_{FSM}	10	A
		50Hz sine wave, 1 cycle	
Junction Temperature	T_j	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Reverse Voltage	V_R	$I_R = 1\text{mA}$	50			V
Forward Voltage	V_F	$I_F = 2\text{A}$			0.55	V
Reverse Current	I_R	$V_R = 25\text{V}$			200	μA
Interterminal Capacitance	C	$V_R = 10\text{V}, f = 1\text{MHz}$		120		pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 300\text{mA}$			20	ns
		See specified Test Circuit.				
Thermal Resistance	$R_{th(j-a)}$ (1)			280		$^\circ\text{C/W}$
	$R_{th(j-a)}$ (2)	Mounted on $250\text{mm}^2 \times 0.8\text{mm}$ ceramic board		100		$^\circ\text{C/W}$

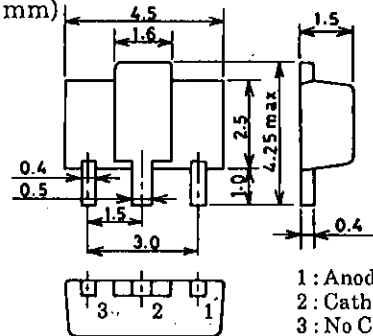
Marking : SH

t_{rr} Test Circuit



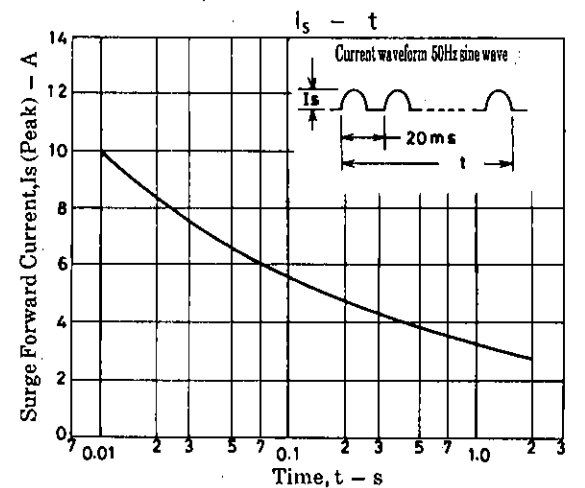
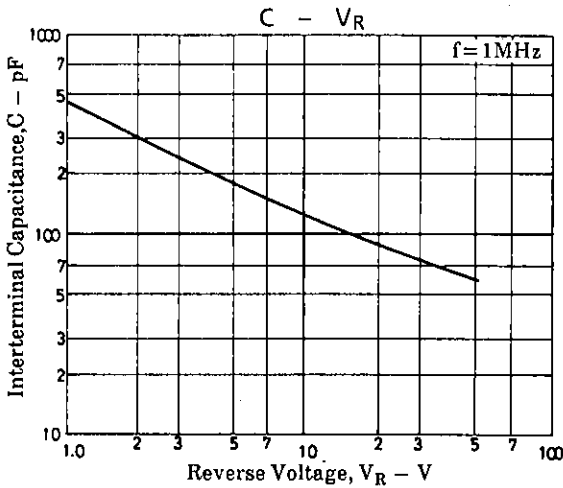
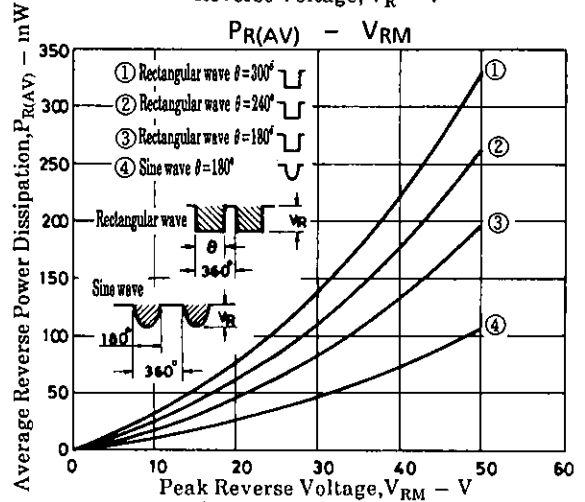
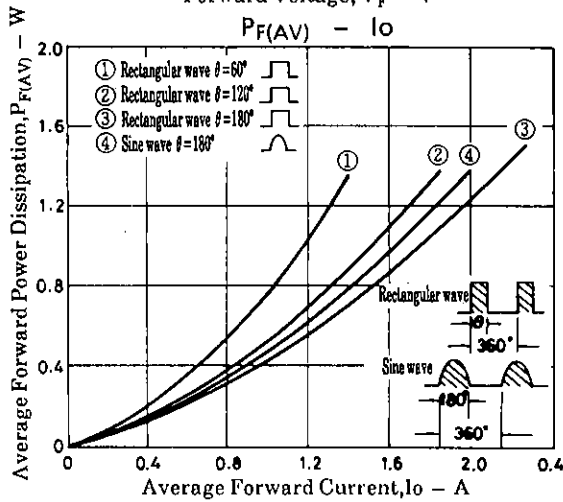
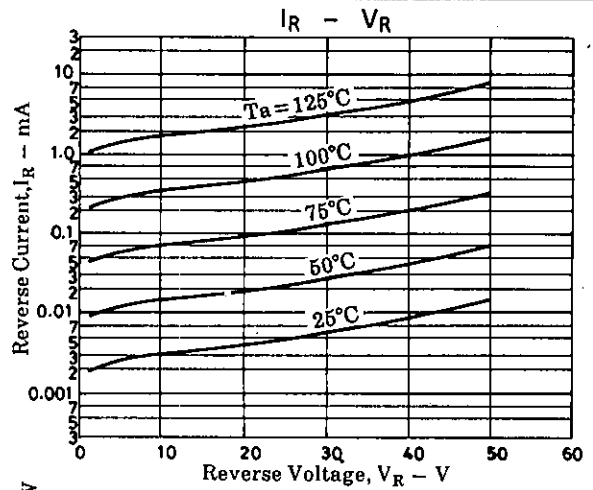
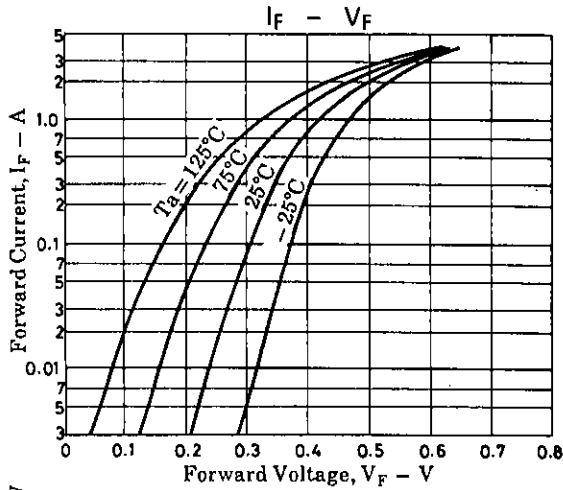
Package Dimensions 1244A

(unit : mm)



- 1 : Anode
- 2 : Cathode
- 3 : No Contact

SANYO : PCP
(Bottom View)



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