

<b>SANYO</b>	No.4175	<b>SB10-09P</b>
		Schottky Barrier Diode
		<b>90V, 1A Rectifier</b>

**Applications**

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

**Features**

- Low forward voltage ( $V_F$  max = 0.7V).
- 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	$V_{RRM}$	90	V
Non-repetitive Peak Reverse Surge Voltage	$V_{RSM}$	95	V
Average Output Current	$I_o$	1	A
Surge Forward Current	$I_{FSM}$	5	A
Junction Temperature	$T_j$	-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

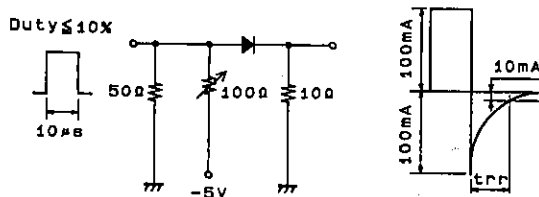
50Hz sine wave, 1 cycle

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

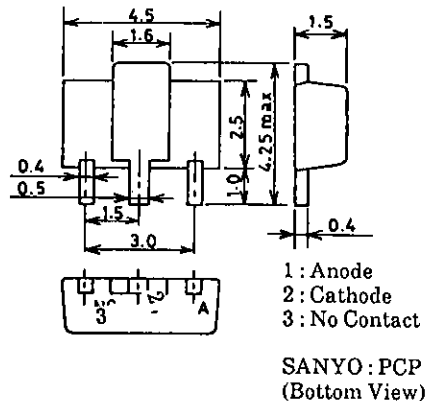
			min	typ	max	unit
Reverse Voltage	$V_R$	$I_R = 1\text{mA}$	90			V
Forward Voltage	$V_F$	$I_F = 1\text{A}$			0.7	V
Reverse Current	$I_R$	$V_R = 45\text{V}$			200	$\mu\text{A}$
Interterminal Capacitance	C	$V_R = 10\text{V}, f = 1\text{MHz}$		70		pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 100\text{mA}$ See specified Test Circuit.			20	ns
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		$^\circ\text{C/W}$

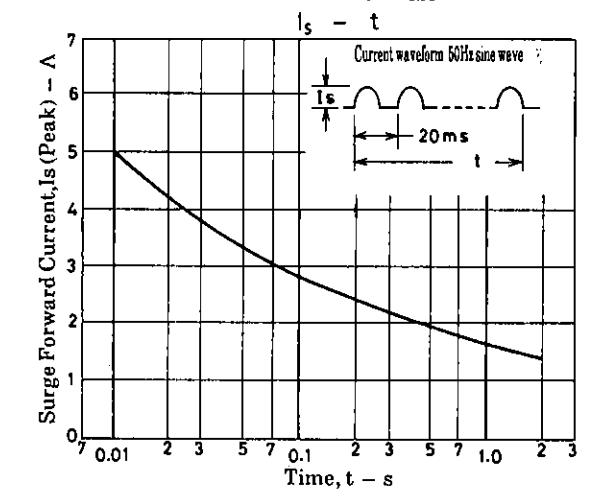
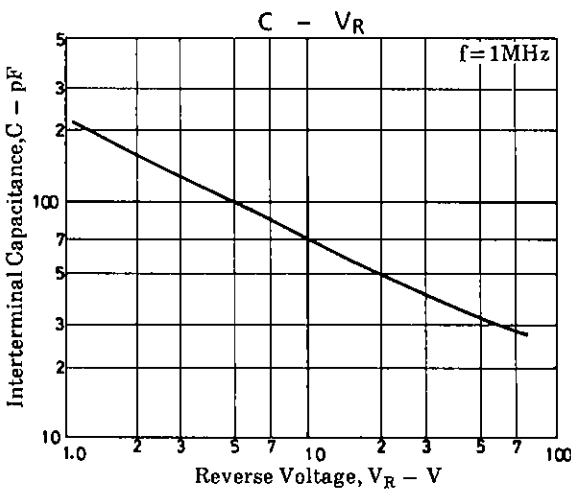
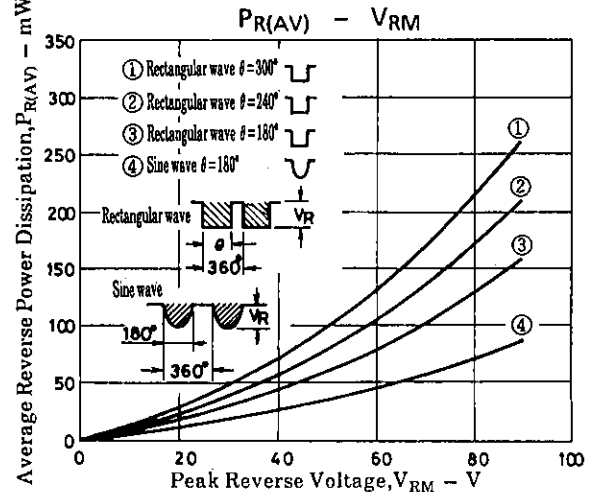
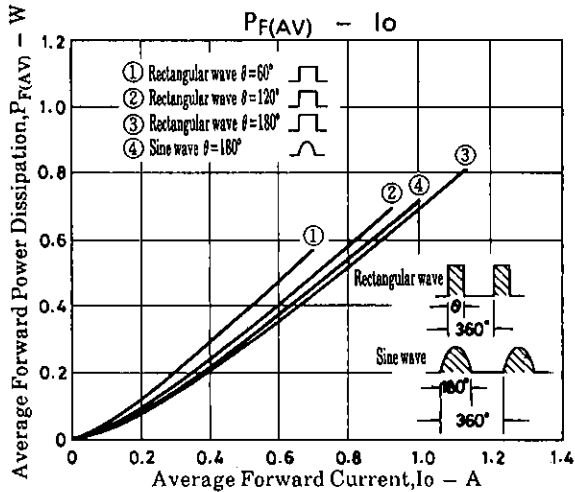
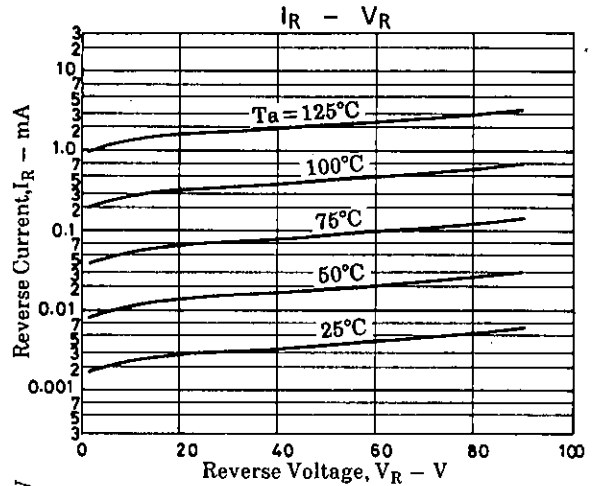
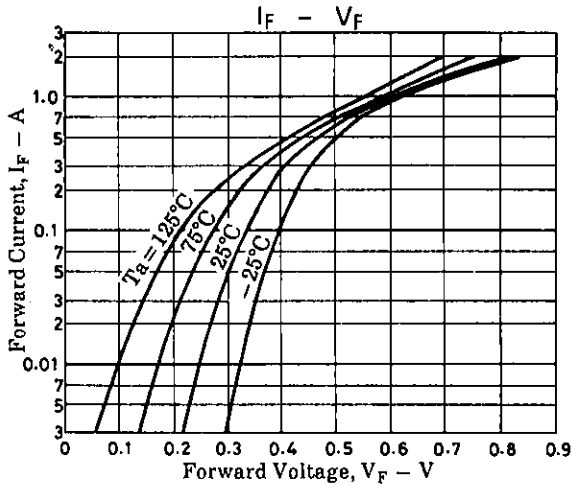
Marking: SJ

**$t_{rr}$  Test Circuit**



**Package Dimensions 1244A**  
(unit: mm)





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