

**SANYO****SB10-05A2, SB10-05A3**

Schottky Barrier Diode

**50V, 1.0A Rectifier****Applications**

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

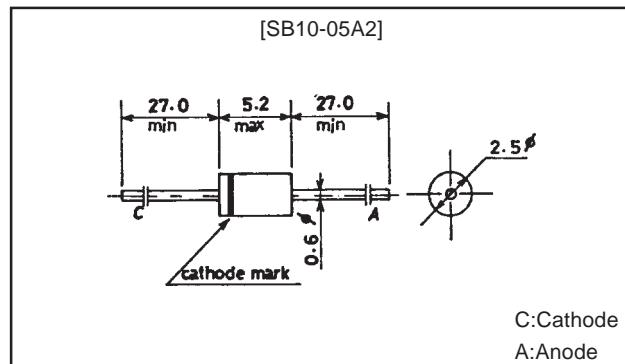
**Features**

- Low forward voltage ( $V_F$  max=0.58V).
- Fast reverse recovery time (trr max=30ns).
- Low switching noise.
- Average rectified current ( $I_O$ =1.0A).

**Package Dimensions**

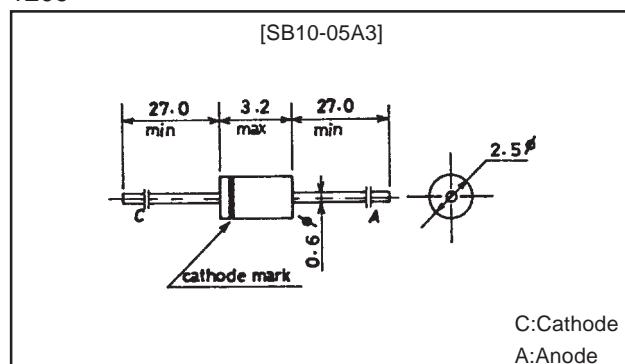
unit:mm

1208



unit:mm

1209

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

Parameter	Symbol	Conditions	Ratings		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$			50	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$			55	V
Average Rectified Current	$I_O$	SB10-05A2   50Hz, resistive load, sine wave, $T_a=33^\circ\text{C}$ ( $L=8\text{mm}$ , $10\times10\text{mm}^2$ print land)		1.0	A
		SB10-05A3   50Hz, resistive load, sine wave, $T_a=29^\circ\text{C}$ ( $L=3\text{mm}$ , $5\times5\text{mm}^2$ print land)		1.0	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle		25	A
Junction Temperature	$T_j$			125	°C
Storage Temperature	$T_{stg}$			-40 to +125	°C

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

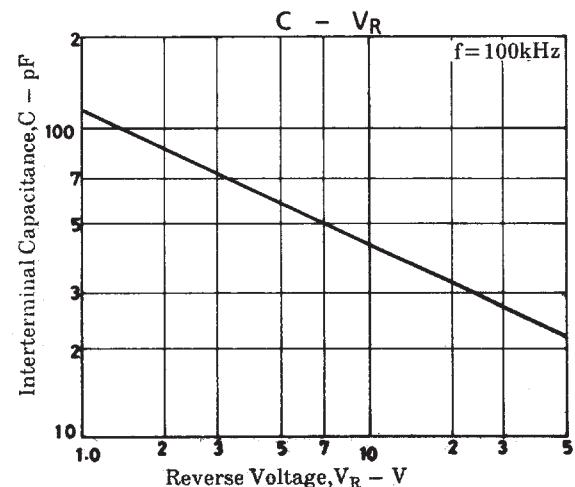
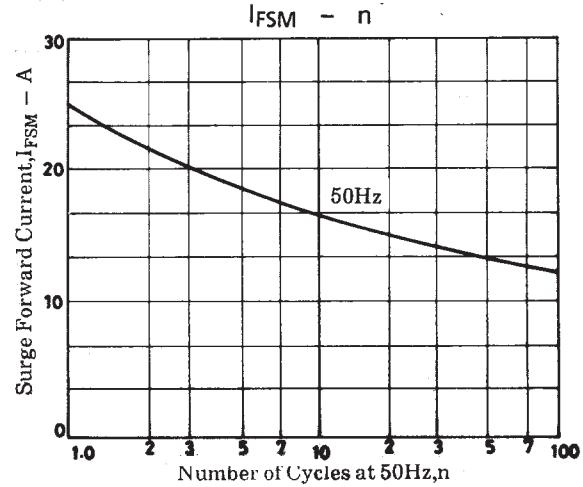
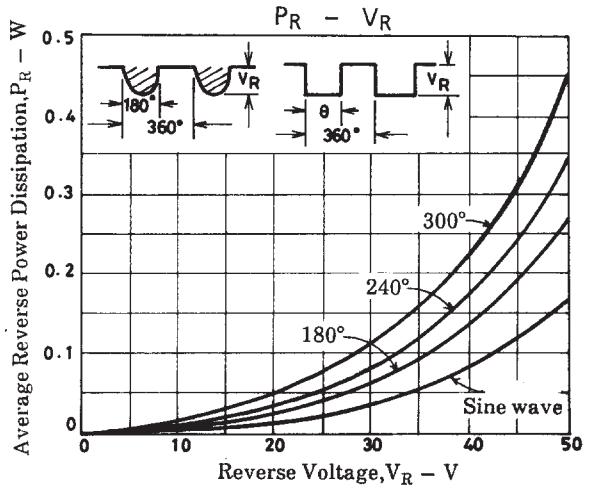
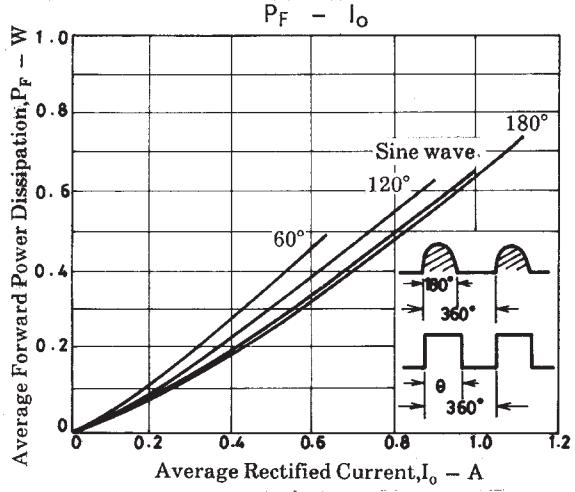
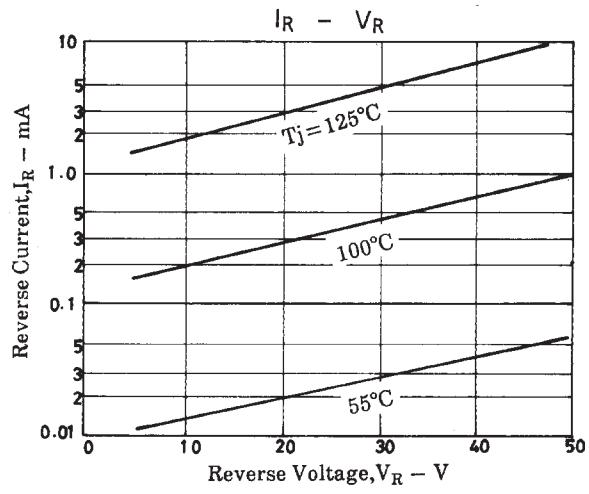
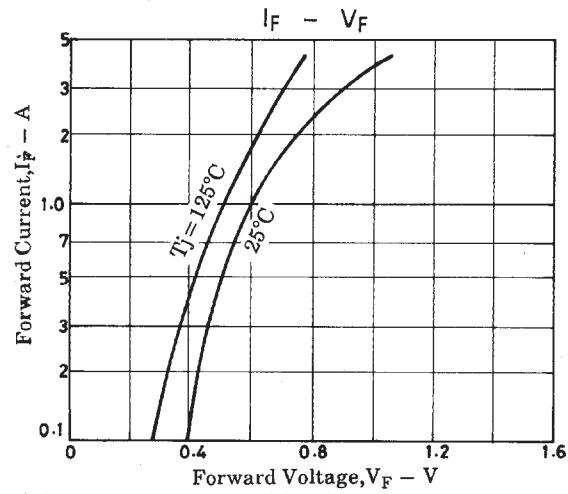
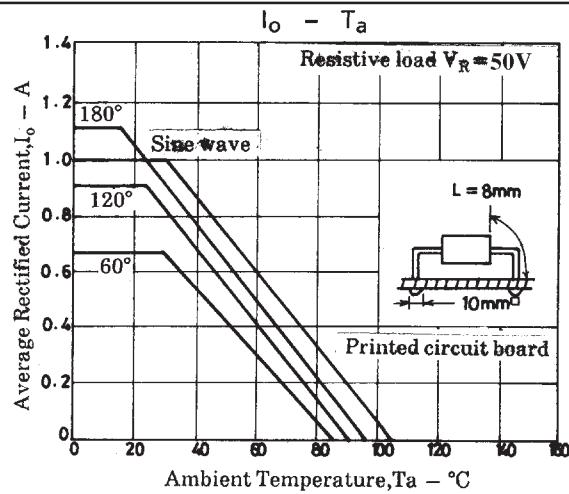
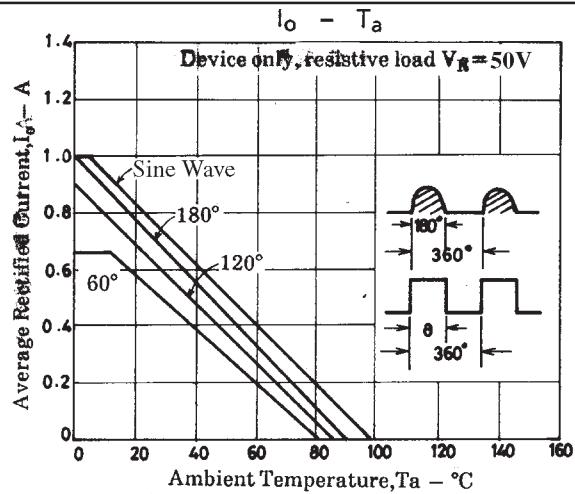
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_F$	$I_F=1.0\text{A}$			0.58	V
Reverse Current	$I_R$	$V_R=50\text{V}$			1.0	mA
Reverse Recovery Time	trr	$I_{FM}=1\text{A}$ , $-dI/dt=50\text{A}/\mu\text{s}$			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$	No fin, device only			140	°C/W

**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters**

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43098HA (KT)/D198TA, TS No.2931-1/3

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