



SB10-03A2/SB10-03A3

30V, 1.0A 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=30ns).
- Low switching noise.
- Average rectified current (I_o =1.0A).

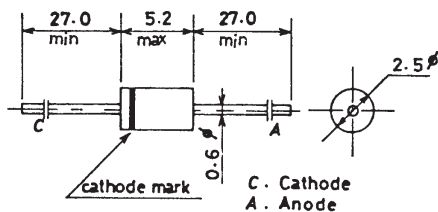
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

				unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
		Nonrepetitive Peak Reverse	V_{RSM}	35
Surge Voltage				
Average Rectified Current	I_o	SB10-03A2	1.0	A
		50Hz, resistive load, sine wave, $T_a=50^\circ\text{C}$ (L=8mm, $10 \times 10\text{mm}^2$ print land)		
Surge Forward Current	I_{FSM}	SB10-03A3	1.0	A
		50Hz, resistive load, sine wave, $T_a=46^\circ\text{C}$ (L=3mm, $5 \times 5\text{mm}^2$ print land)		
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	40	A
Junction Temperature	T_j		125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-40 to +125	$^\circ\text{C}$

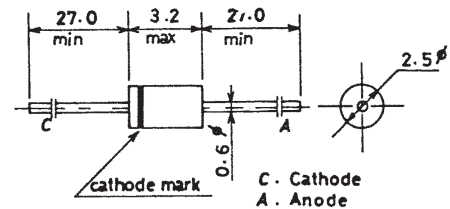
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Forward Voltage	V_F	$I_F=1.0\text{A}$			0.55	V
Reverse Current	I_R	$V_R=30\text{V}$			1.0	mA
Reverse Recovery Time	t_{rr}	$I_{FM}=1\text{A}$, $-di/dt=50\text{A}/\mu\text{s}$			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$	No fin, device only			140	$^\circ\text{C}/\text{W}$

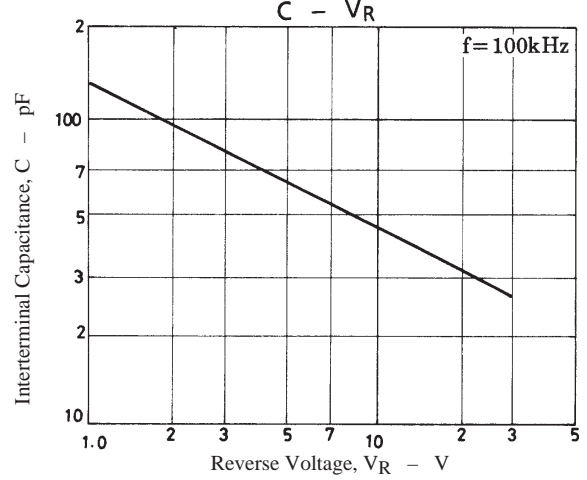
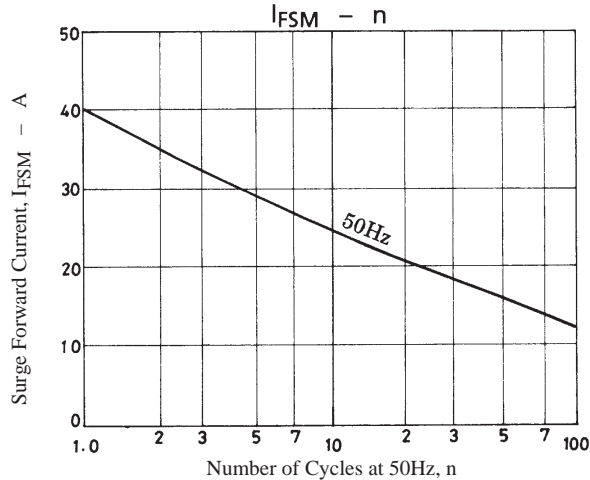
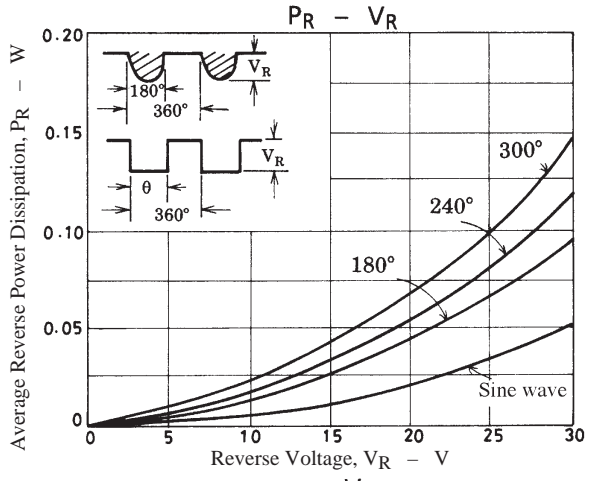
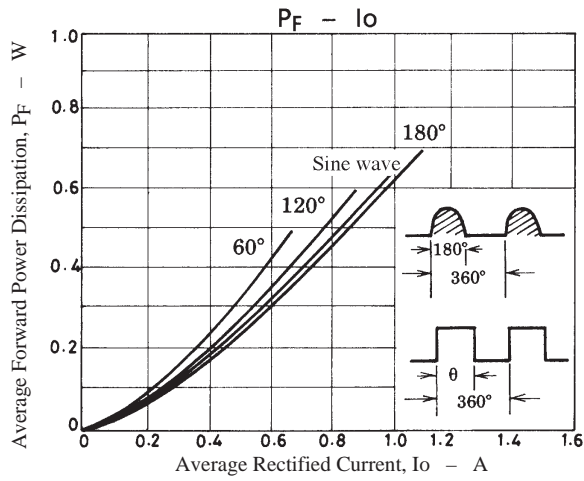
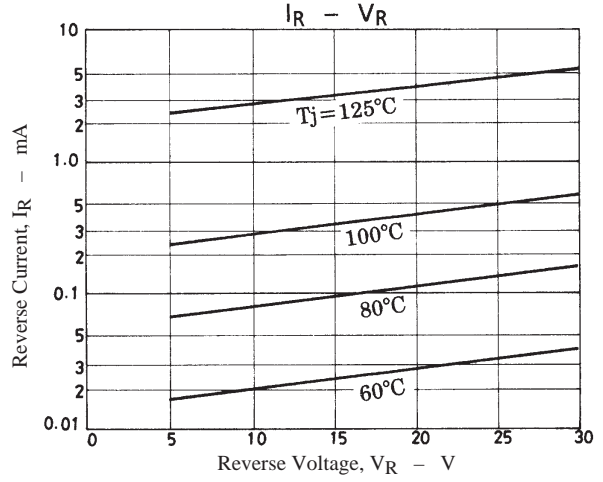
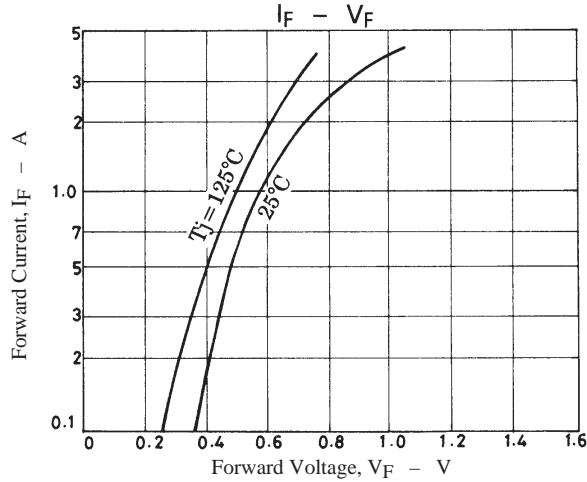
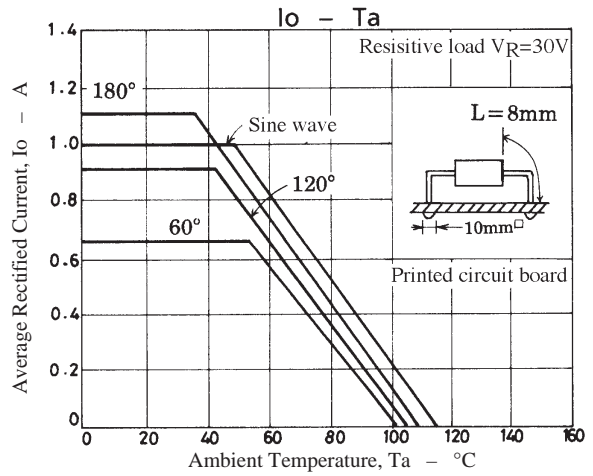
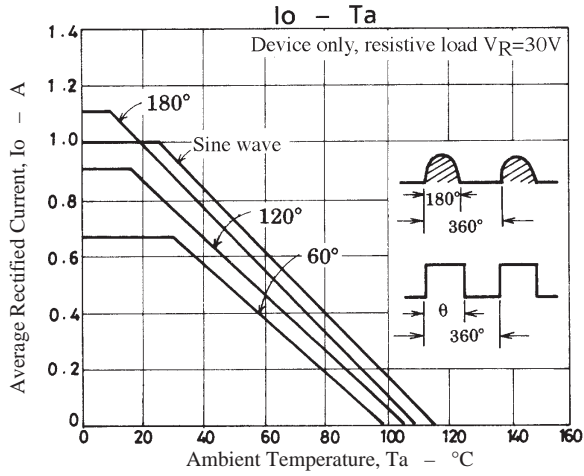
[SB10-03A2]
Package Dimensions 1208
(unit : mm)



[SB10-03A3]
Package Dimensions 1209
(unit : mm)



SB10-03A2/SB10-03A3



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