



SB10-03A2, SB10-03A3

Schottky Rectifier, 30V, 1A

ON Semiconductor®

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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)

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Rectified Current	I_O	SB10-03A2 50Hz, resistive load, sine wave, $T_a=50^\circ\text{C}$ (L=8mm, 10×10mm ² print land)	1.0	A
		SB10-03A3 50Hz, resistive load, sine wave, $T_a=46^\circ\text{C}$ (L=3mm, 5×5mm ² print land)	1.0	A
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	$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

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

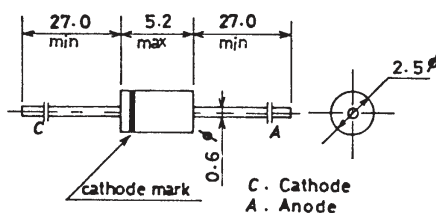
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	V_F	$I_F=1.0\text{A}$			0.55	V
Reverse Current	I_R	$V_R=30\text{V}$			1.0	mA
Reverse Recovery Time	t_{rr}	$I_F=1\text{A}$, $-di/dt=50\text{A}/\mu\text{s}$			30	ns
Thermal Resistance(Junction-Ambient)	$R_{th(j-a)}$	No fin, device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

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

Package Dimensions

unit : mm (typ)

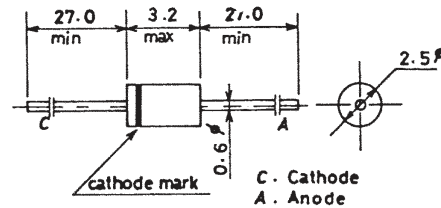
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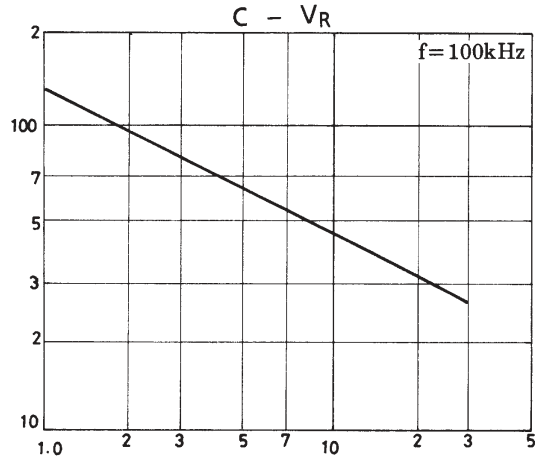
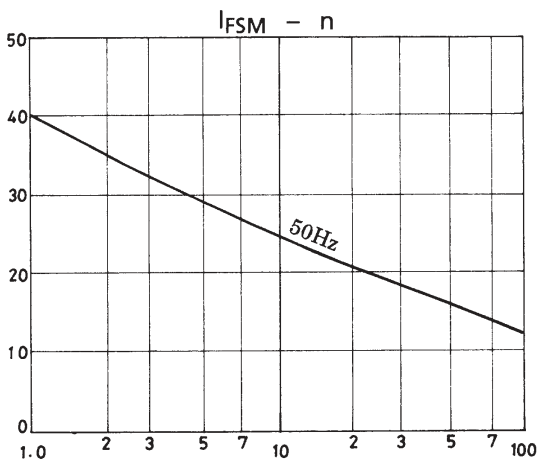
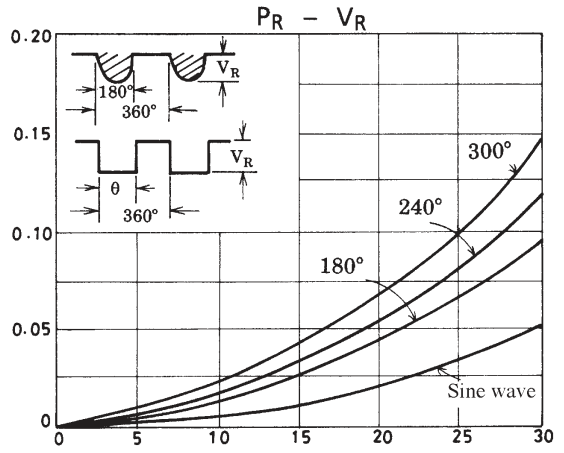
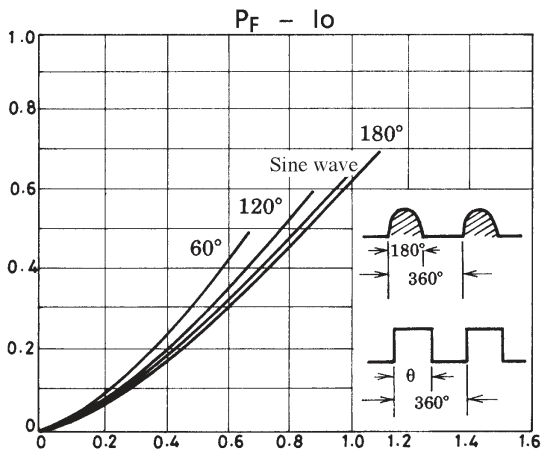
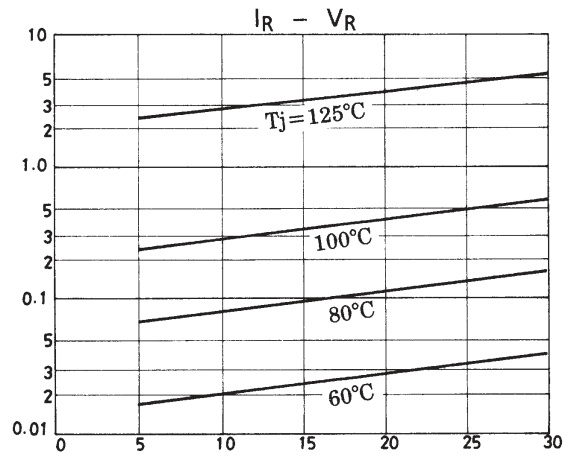
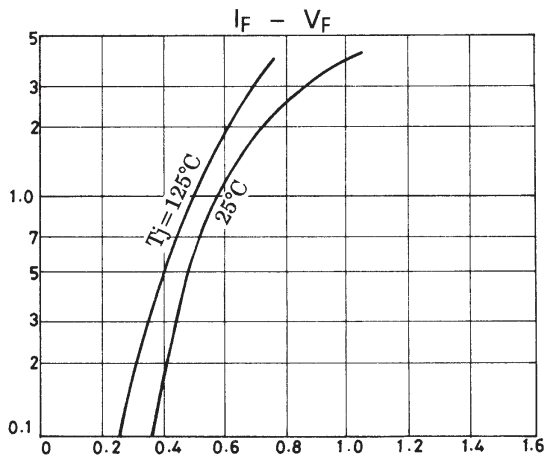
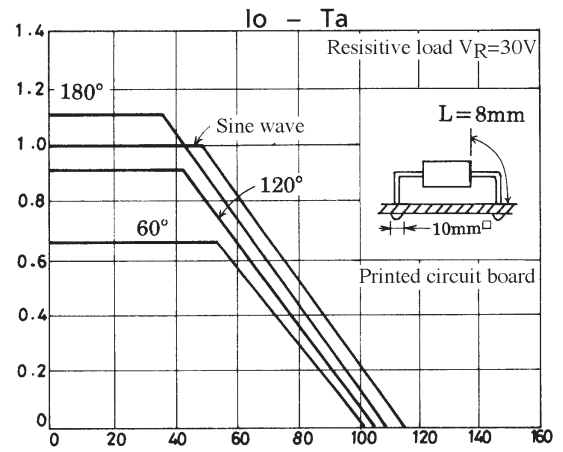
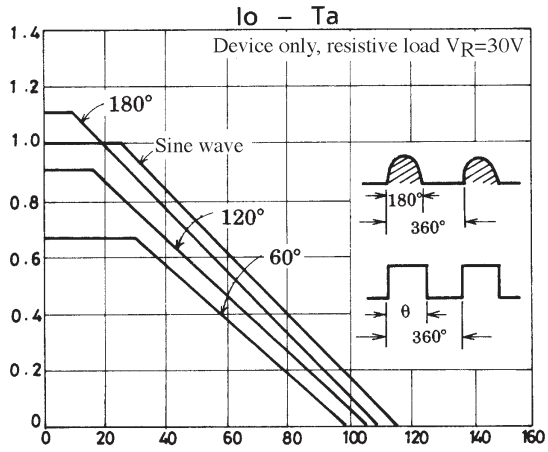


Package Dimensions

unit : mm (typ)

SB10-03A3





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