

# SBT80-10GS

 — Schottky Barrier Diode (Twin Type • Cathode Common)  
**100V, 8A Rectifier**

## Applications

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

## Features

- Guaranteed up to  $T_j=150^{\circ}\text{C}$
- Short reverse recovery time
- High reliability due to highly reliable planar structure
- Low forward voltage ( $V_F \text{ max}=0.80\text{V}$ )
- Low switching noise

## Specifications

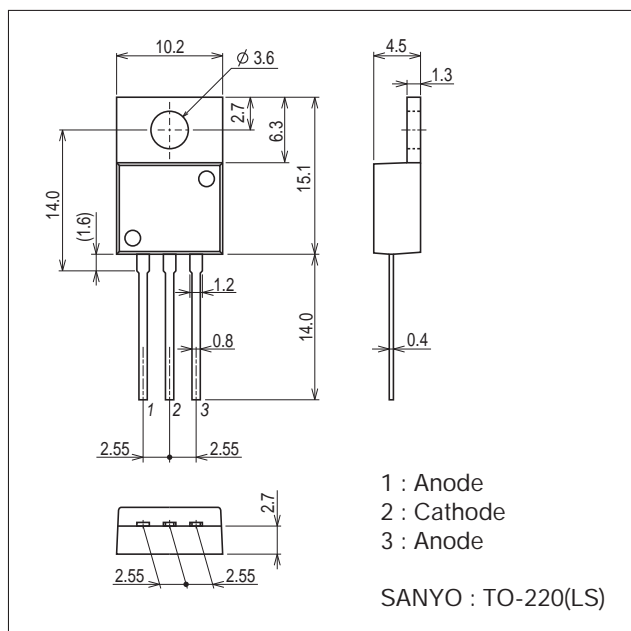
Absolute Maximum Ratings at  $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		100	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		105	V
Average Output Current	$I_O$	50Hz resistive load, sine wave $T_c=86^{\circ}\text{C}$	8	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	60	A
Junction Temperature	$T_j$		-55 to +150	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^{\circ}\text{C}$

## Package Dimensions

unit : mm (typ)

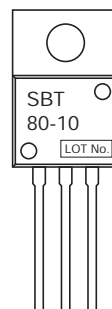
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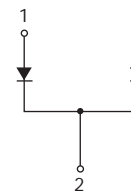
## Product & Package Information

- Package : TO-220(LS)
- JEITA, JEDEC : SC-46, TO-220AB
- Minimum Packing Quantity : 100 pcs./bag, 50 pcs./magazine

## Marking



## Electrical Connection

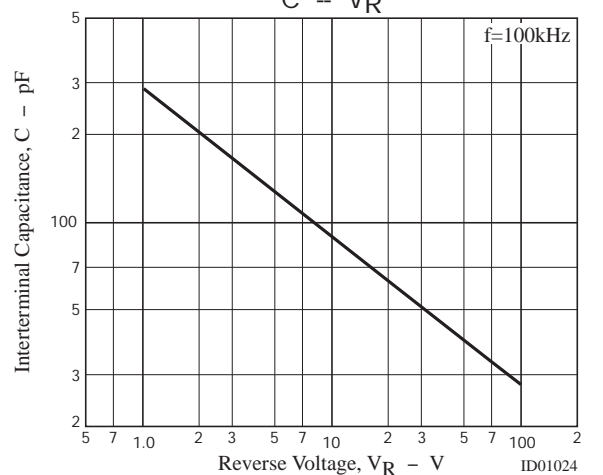
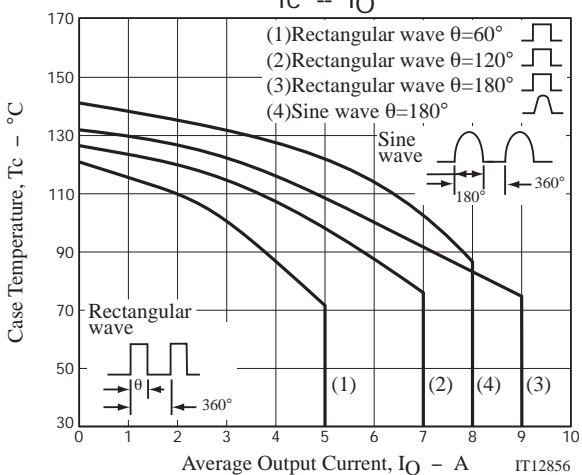
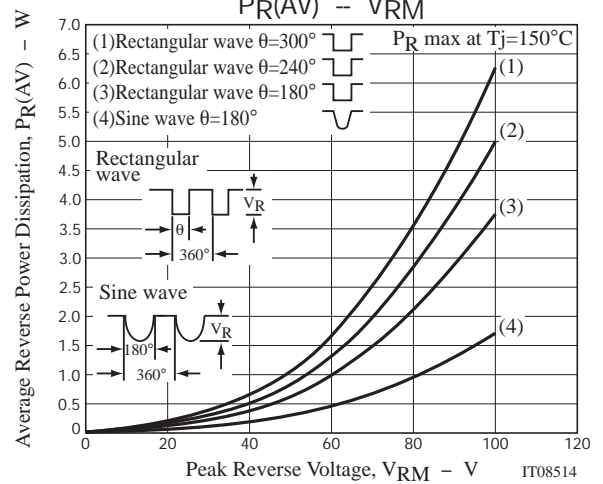
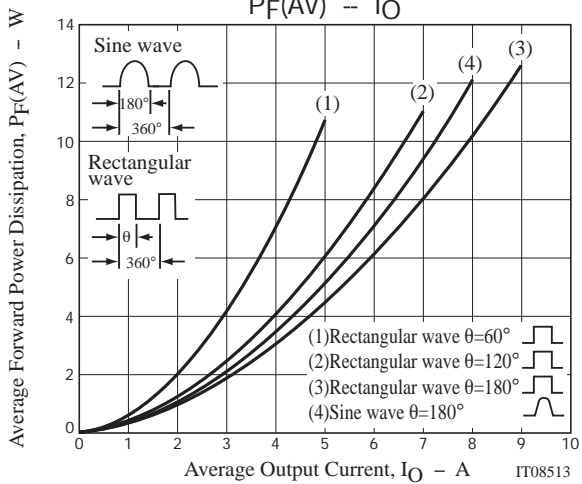
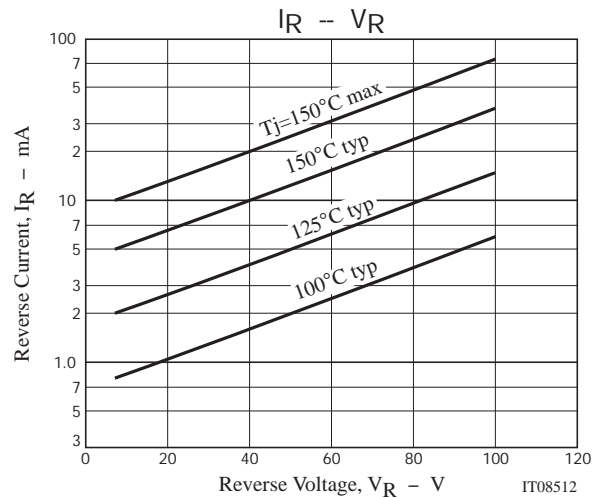
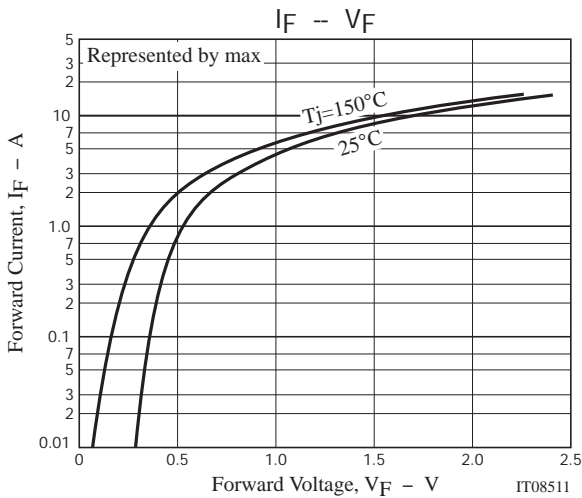


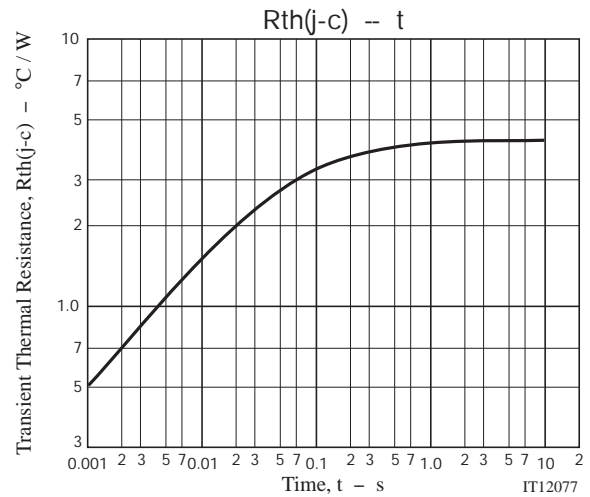
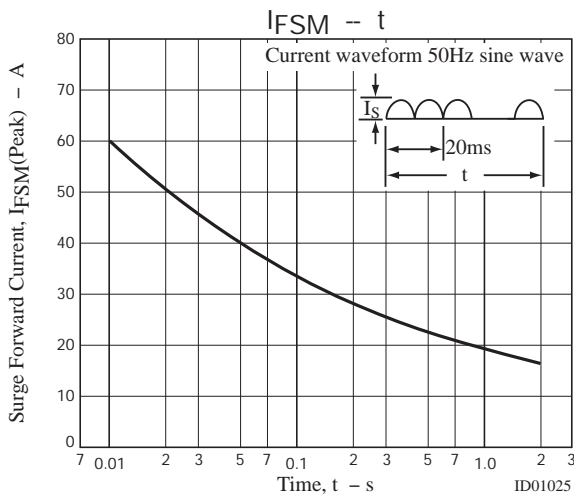
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## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$ , $T_j=25^\circ\text{C}$ *	100			V
Forward Voltage	$V_F$	$I_F=3.0\text{A}$ , $T_j=25^\circ\text{C}$ *			0.80	V
Reverse Current	$I_R$	$V_R=50\text{V}$ , $T_j=25^\circ\text{C}$ *			0.1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$ , $T_j=25^\circ\text{C}$ *		90		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			4.6	$^\circ\text{C} / \text{W}$

Note) \* : Value per element





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