



# SB80-05H — Schottky Barrier Diode (Twin Type · Cathode Common)

## 50V, 8A Rectifier

### Applications

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

### Features

- Low forward voltage ( $V_F$  max=0.55V).
- Short reverse recovery time ( $t_{rr}$  max=60ns).
- Low switching noise.
- Low leakage current and high reliability due to reliable planar structure.

### 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 Output Current	$I_O$	50Hz resistive load, $T_c=109^\circ\text{C}$	8	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	100	A
Junction Temperature	$T_J$		-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=2\text{mA}$ , $T_J=25^\circ\text{C}$ *	50			V
Forward Voltage	$V_F$	$I_F=4\text{A}$ , $T_J=25^\circ\text{C}$ *			0.55	V
Reverse Current	$I_R$	$V_R=25\text{V}$ , $T_J=25^\circ\text{C}$ *			0.4	mA
Reverse Recovery Time	$t_{rr}$	$I_F=2\text{A}$ , $T_J=25^\circ\text{C}$ , $-dI_F/dt=10\text{A}/\mu\text{s}$ *			60	ns
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			2.5	$^\circ\text{C}/\text{W}$

\* : Value per element

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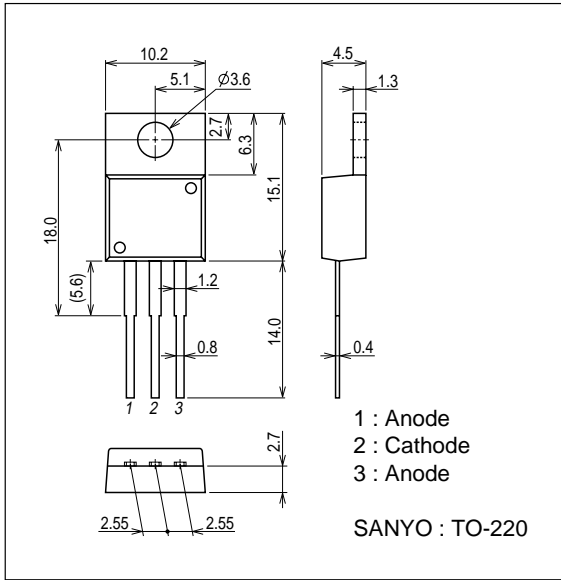
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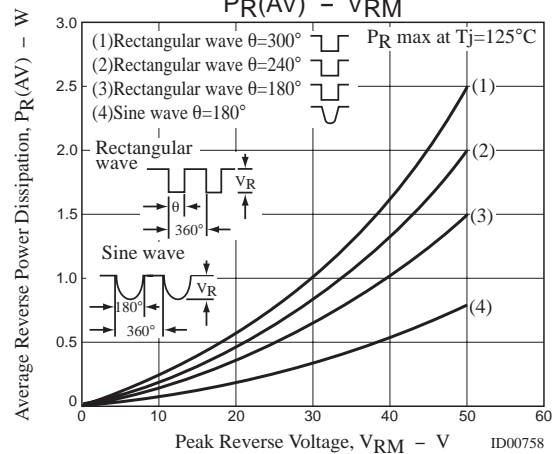
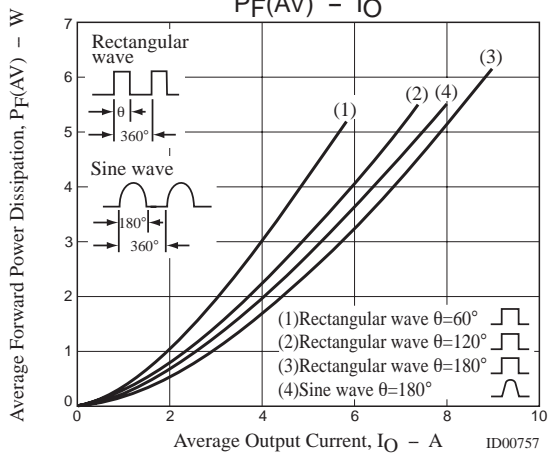
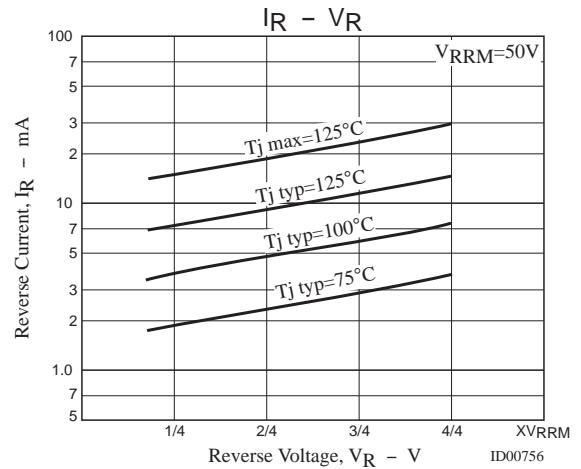
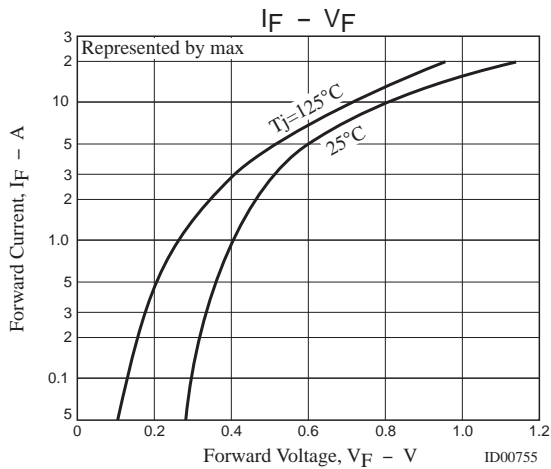
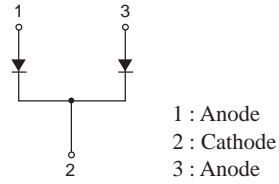
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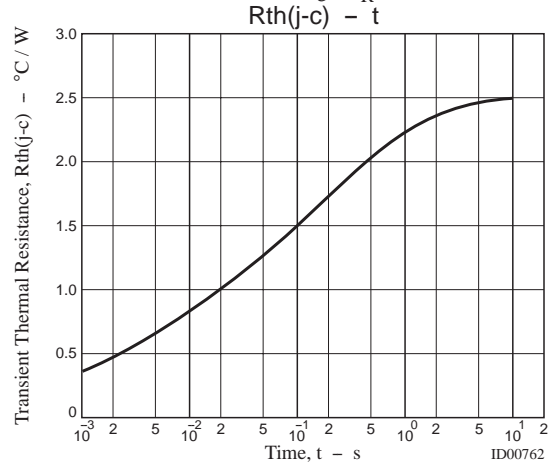
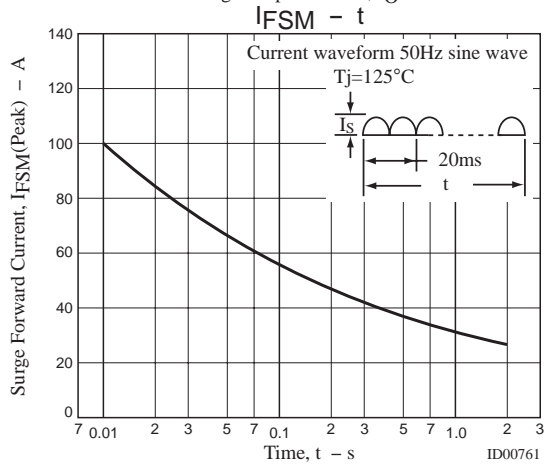
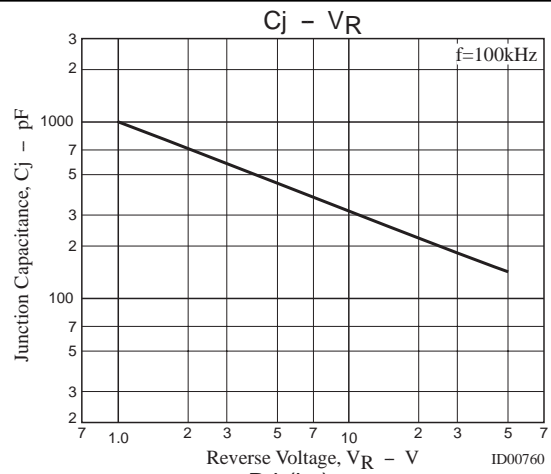
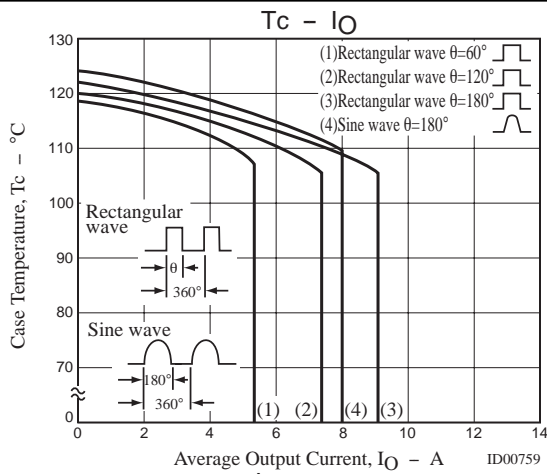
Package Dimensions

unit : mm (typ)  
7507-003



Electrical Connection





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