

**SB005W03**

Shottky Barrier Diode (Twin Type · Cathode Common)

**50V, 6A Rectifier****Applications**

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

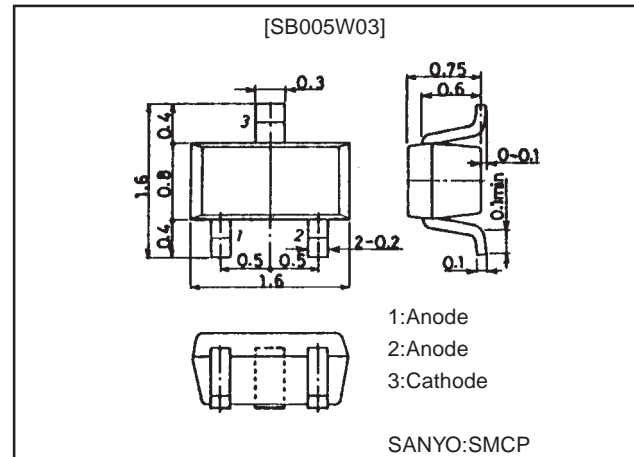
**Features**

- Low forward voltage ( $V_F$  max=0.55V).
- Fast reverse recovery time.
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

**Package Dimensions**

unit:mm

1270

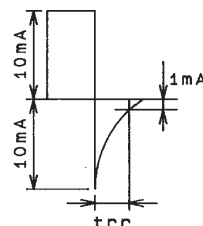
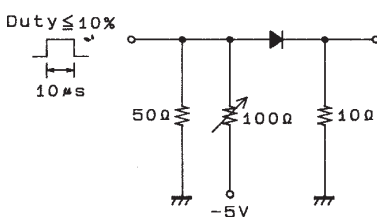
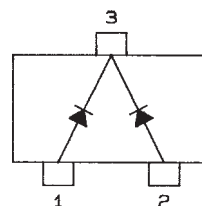
**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

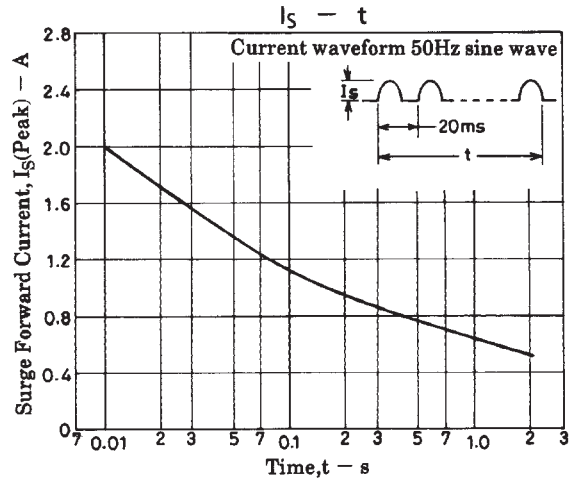
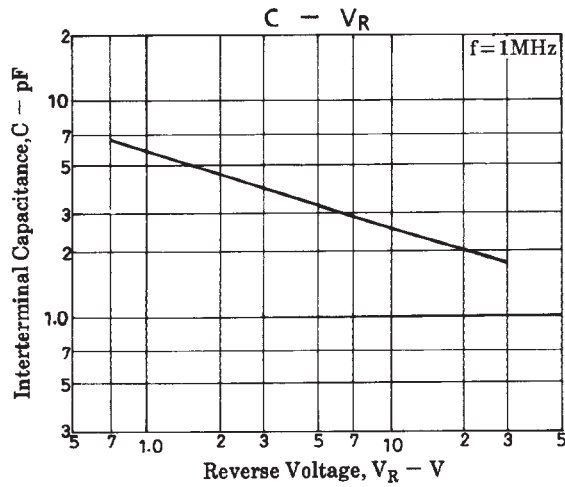
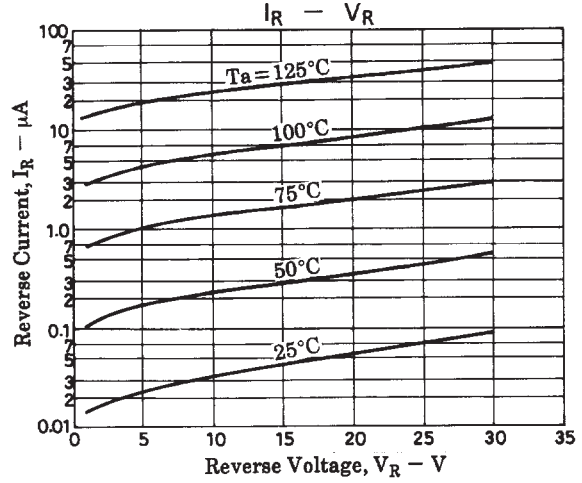
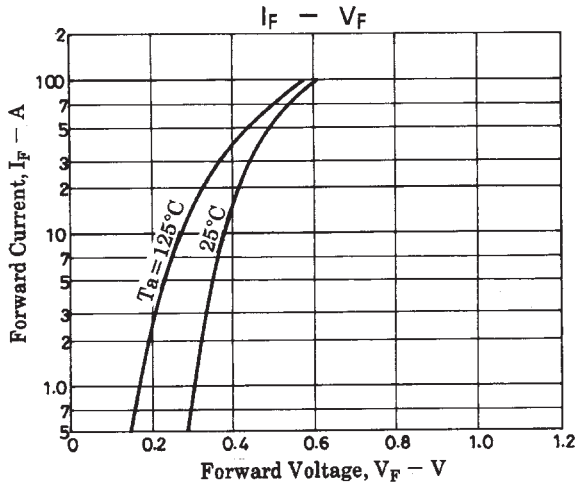
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		30	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		35	V
Average Output Current	$I_O$		50	mA
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1cycle	2	A
Junction Temperature	$T_j$		-55 to +125	$^\circ\text{C}$
Storage 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	$V_R$	$I_R=20\mu\text{A}$	30			V
Forward Voltage	$V_F$	$I_F=50\text{mA}$			0.55	V
Reverse Current	$I_R$	$V_R=15\text{V}$			5	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		2.6		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , See specified Test Circuit			10	ns

· Marking:LA

 **$t_{rr}$  Test Circuit****Electrical Connection**



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