

**SANYO**

No.2655A

**SB05-18M**

Schottky Barrier Diode  
180V, 500mA Rectifier

**Applications**

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

**Features**

- Low forward voltage ( $V_F$  max = 0.85V)
- Fast reverse recovery time ( $t_{rr}$  max = 20ns)
- Low switching noise
- Low leakage current and high reliability due to highly reliable planar structure

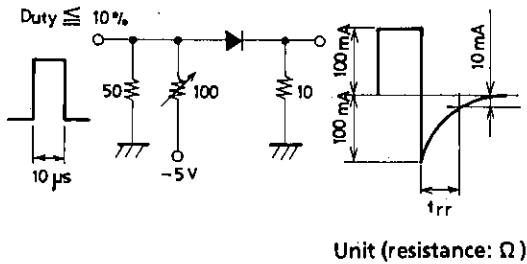
**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$**

			unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	-180	V
Nonrepetitive Peak Reverse Voltage	$V_{RSM}$	-190	V
Surge Voltage			
Average Output Current	$I_O$	50Hz, resistive load, $T_a = 26^\circ\text{C}$	500 mA
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	10 A
Junction Temperature	$T_j$	-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

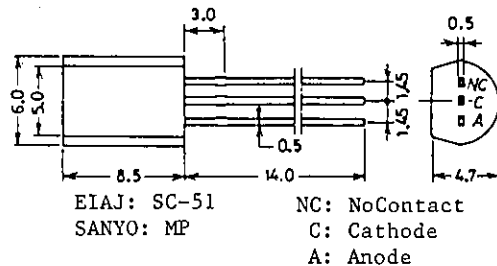
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$**

			min	typ	max	unit
Reverse Voltage	$V_R$	$I_R = -500\mu\text{A}$	-180			V
Forward Voltage	$V_F$	$I_F = 500\text{mA}$			0.85	V
Reverse Current	$I_R$	$V_R = -90\text{V}$			-60	$\mu\text{A}$
Interterminal Capacitance	c	$V_R = -10\text{V}, f = 1\text{MHz}$		45		pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 100\text{mA}$			20	ns
		See specified Test Circuit.				
Thermal Resistance	$R_{thj-a}$			85		$^\circ\text{C/W}$

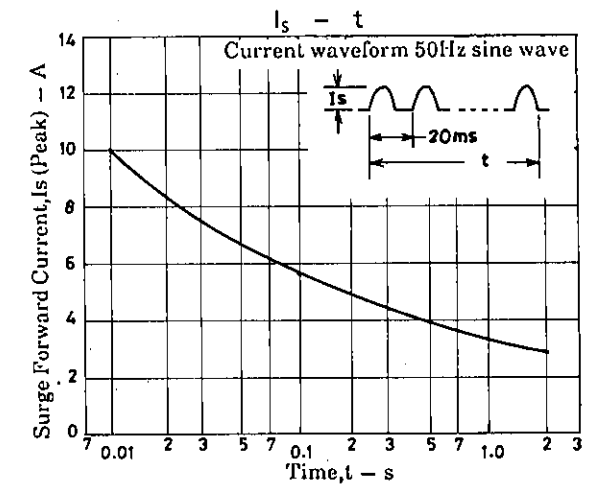
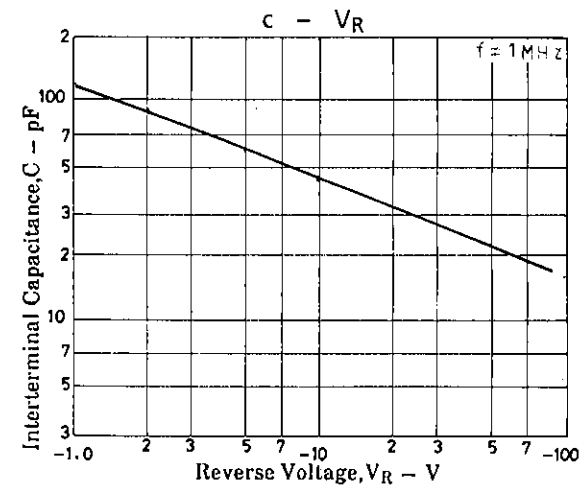
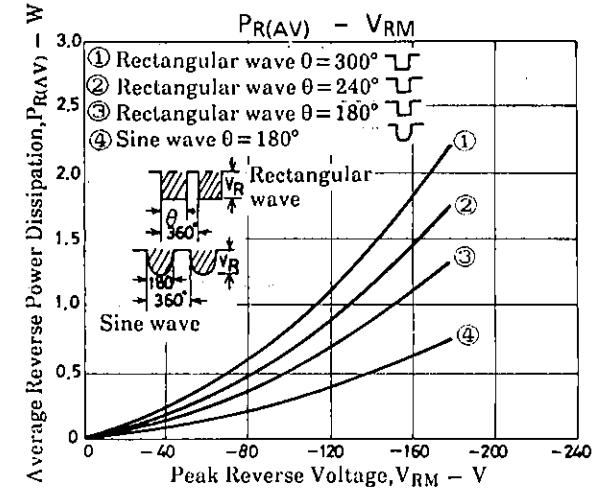
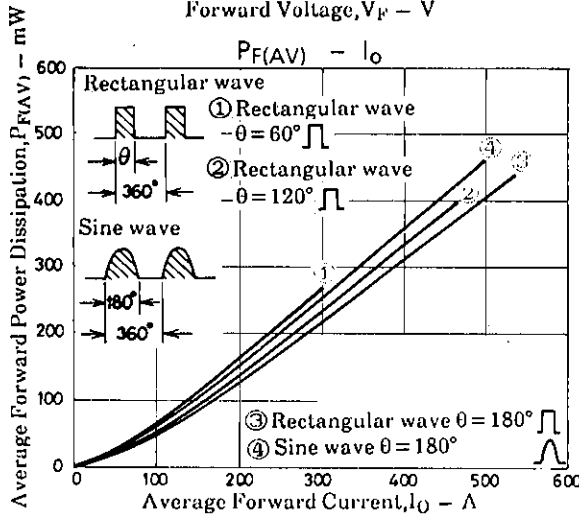
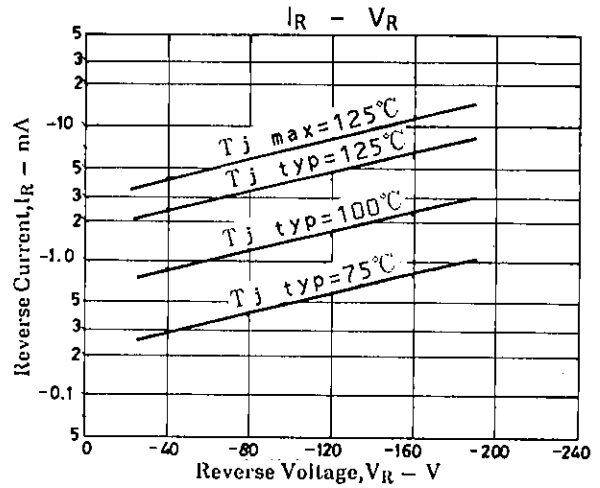
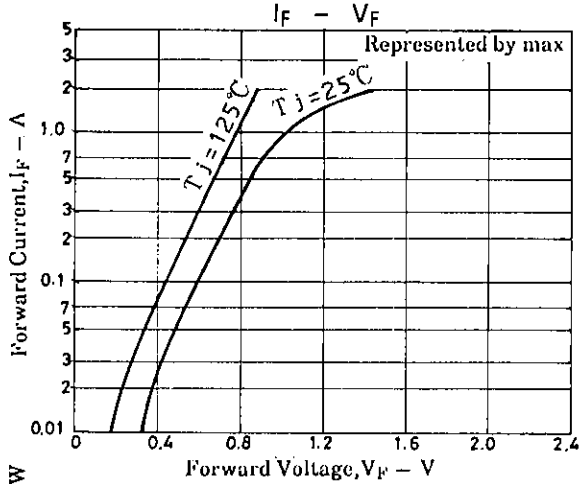
**$t_{rr}$  Test Circuit**



**Package Dimensions 1158**  
(unit: mm)



SB05-18M



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