

No.5683

SB05-18V

Schottky Barrier Diode

180V, 500mA Rectifier

## **Applications**

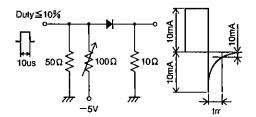
· High frequency rectification (switching regulators, converters, choppers).

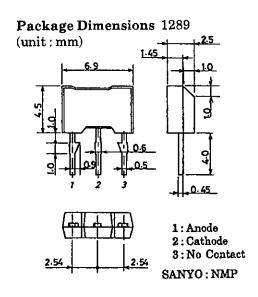
## **Features**

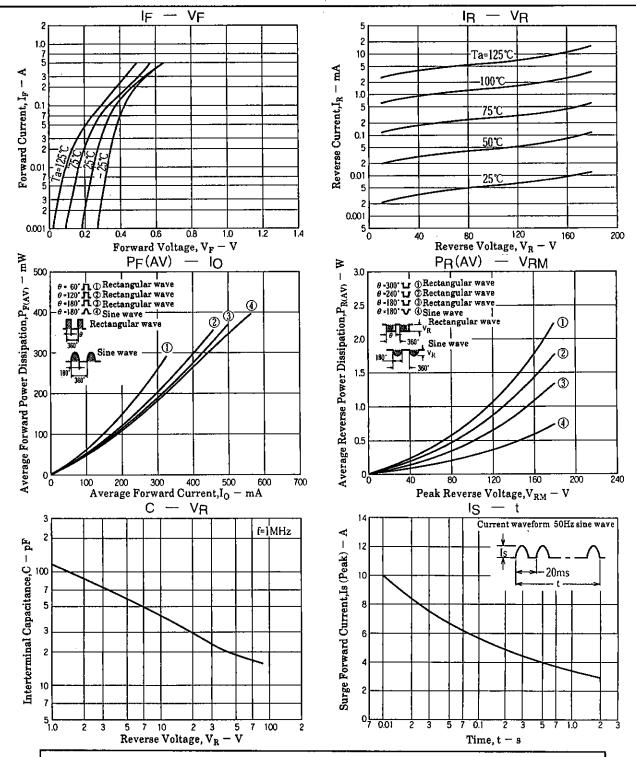
- · Low forward voltage ( $V_F \max = 0.85V$ ).
- Fast reverse recovery time (trr max = 20ns).
- · Low switching noise.
- · Low leakage current and high reliability due to highly reliable planar structure.

Absolute Maximum Ratings at Ta = 25°C					unit	
Repetitive Peak Reverse Voltage	$V_{RRM}$			180	V	
Non-repetitive Peak	$V_{RSM}$			190	v	
Reverse Surge Voltage	2002					
Average Output Current	$I_{O}$	50Hz resistive load, $Ta = 26$ °C		500	mA	
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle		10	Α	
Junction Temperature	Tj	· -		125	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to -	+125	$^{\circ}\mathrm{C}$	
Electrical Characteristics at Ta = 25°C			min	typ	max	unit
Reverse Voltage	$V_R$	$I_R = 500 \mu A$	180			v
	$V_{\rm F}$	$I_F = 500 \text{mA}$			0.85	v
Reverse Current	$I_R$	$\hat{V}_R = 90V$			60	μÅ
	Ċ	$V_R = 10V, f = 1MHz$		45		$\mathbf{pF}$
Reverse Recovery Time	trr	$I_{\rm F} = I_{\rm R} = 100 \mathrm{mA}$			20	ns
-		See specified Test Circuit.				22
Thermal Resistance	Rth j-a	•		110		°C/W

## trr Test Circuit







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