

# PR3BMF11NSZ

## 8-Pin DIP Type, Large Output current SSR

### ■ Features

1. Compact 8-pin dual-in-line package type.
2. RMS ON-state current  $I_{T(rms)}$ :1.2A
3. High repetitive peak OFF-state voltage.  
( $V_{DRM}$ :MIN. 600V)
4. Isolation voltage between input and output.  
( $V_{iso(rms)}$ :4kV)
5. Under preparation for UL and CSA.

### ■ Applications

1. Various types of home appliances.

### ■ Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ )

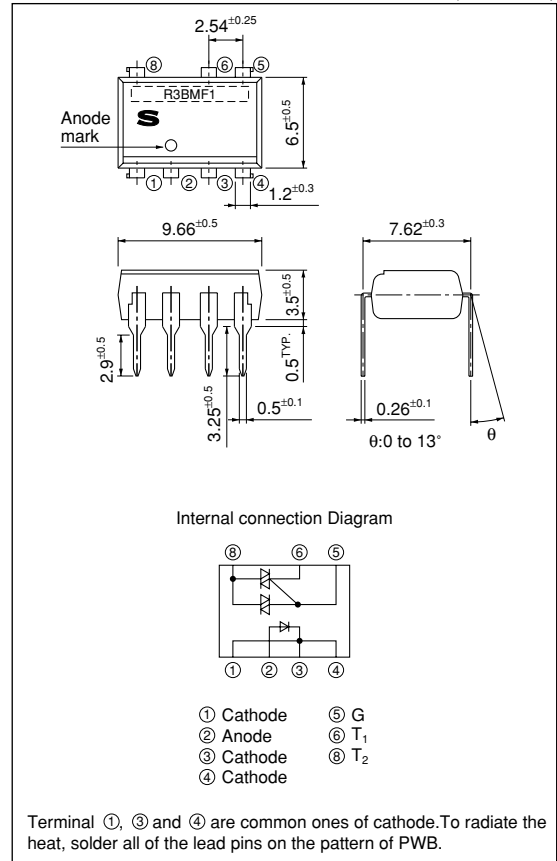
	Parameter	Symbol	Rating	Unit
Input	*1 Forward current	$I_F$	50	mA
	Reverse voltage	$V_R$	6	V
Output	*1 RMS ON-state current	$I_{T(rms)}$	1.2	A
	Peak one cycle surge current	$I_{surge}$	12 (50Hz sine wave)	A
	Repetitive peak OFF-state voltage	$V_{DRM}$	600	V
	*2 Isolation voltage	$V_{iso(rms)}$	4.0	kV
	Operating temperature	$T_{opr}$	-30 to 105	$^\circ\text{C}$
	Storage temperature	$T_{stg}$	-40 to 125	$^\circ\text{C}$
	Soldering temperature	$T_{sol}$	260 (For 10s)	$^\circ\text{C}$

\*1 The derating factors of absolute maximum ratings due to ambient temperature are shown in Fig. 1, 2

\*2 AC for 1 min, 40 to 60%RH,  $f=60\text{Hz}$

### ■ Outline Dimensions

(Unit : mm)

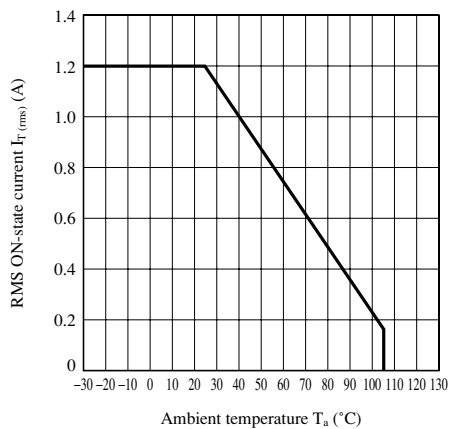


## ■ Electrical Characteristics

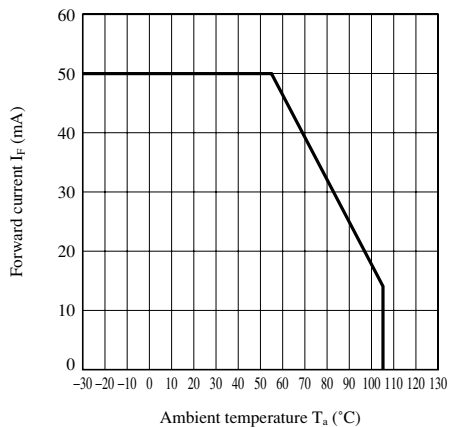
(T<sub>a</sub>=25°C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	–	1.2	1.4	V
	Reverse current	I <sub>R</sub>	V <sub>R</sub> =3V	–	–	10	μA
Output	Repetitive peak OFF-state current	I <sub>DRM</sub>	V <sub>D</sub> =V <sub>DRM</sub>	–	–	100	μA
	ON-state voltage	V <sub>T</sub>	I <sub>T</sub> =1.2A	–	–	3.0	V
	Holding current	I <sub>H</sub>	V <sub>D</sub> =6V	–	–	25	mA
	Critical rate of rise of OFF-state voltage	dV/dt	V <sub>D</sub> =1/√2 · V <sub>DRM</sub>	100	–	–	V/μs
Transfer characteristics	Minimum trigger current	I <sub>FT</sub>	V <sub>D</sub> =6V, R <sub>L</sub> =100Ω	–	–	10	mA
	Isolation resistance	R <sub>ISO</sub>	DC=500V, 40 to 60%RH	5×10 <sup>10</sup>	10 <sup>11</sup>	–	Ω
	Turn-on time	t <sub>on</sub>	V <sub>D</sub> =6V, R <sub>L</sub> =100Ω, I <sub>F</sub> =20mA	–	–	100	μs

**Fig.1 RMS ON-state Current vs. Ambient Temperature**



**Fig.2 Forward current I<sub>F</sub> (mA) vs. Ambient Temperature**



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