

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 ($T_a=25^\circ\text{C}$)

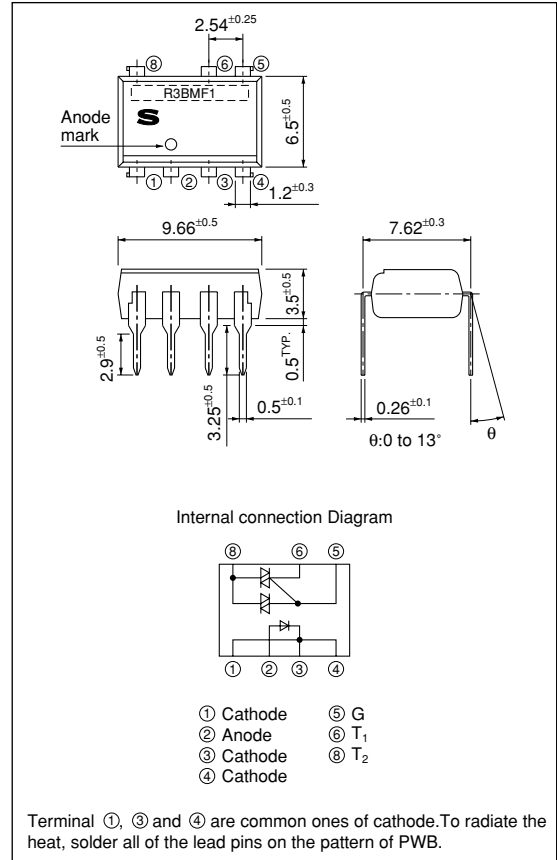
	Parameter	Symbol	Rating	Unit
Input	*1 Forward current	I_F	50	mA
	Reverse voltage	V_R	6	V
Output	*1 RMS ON-state current	$I_{T(rms)}$	1.2	A
	Peak one cycle surge current	I_{surge}	12 (50Hz sine wave)	A
	Repetitive peak OFF-state voltage	V_{DRM}	600	V
	*2 Isolation voltage	$V_{iso(rms)}$	4.0	kV
	Operating 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_a=25°C)

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

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

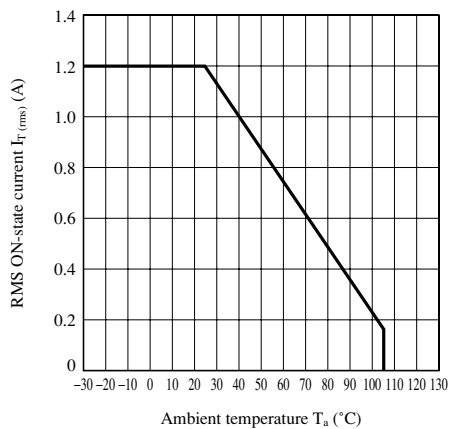
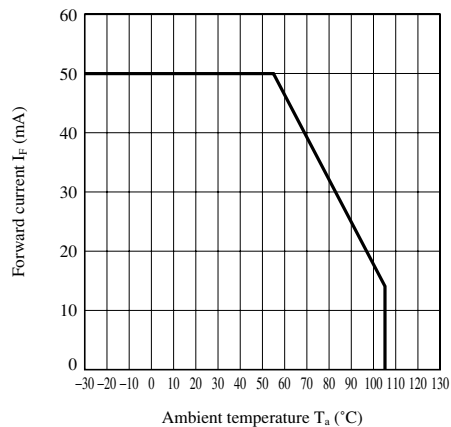


Fig.2 Forward current I_F (mA) vs. Ambient Temperature



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