

PR36MF22NSZ/ PR39MF22NSZ

■ Features

1. Compact 8-pin dual-in-line package type.
2. RMS ON-state current $I_{T(rms)}$: 0.6A, 0.9A
3. Built-in zero-cross circuit.
4. High repetitive peak OFF-state voltage.
(V_{DRM} : MIN. 600V)
5. Isolation voltage between input and output.
($V_{iso(rms)}$: 4kV)
6. Under preparation for UL and CSA.

■ Applications

1. Various types of home appliances

■ Model Line-up

RMS ON-state current (rms)	Model No.
0.6A	PR36MF22NSZ
0.9A	PR39MF22NSZ

■ 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	$I_{T(rms)}$	PR36MF22NSZ	0.6
	PR39MF22NSZ		0.9	
	*2 Peak one cycle surge current	I_{surge}	PR36MF22NSZ	6
	PR39MF22NSZ		9	
Repetitive peak OFF-state voltage		V_{DRM}	600	V
*3 Isolation voltage		$V_{iso(rms)}$	4.0	kV
Operating temperature		T_{opr}	-30 to +85	$^\circ\text{C}$
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

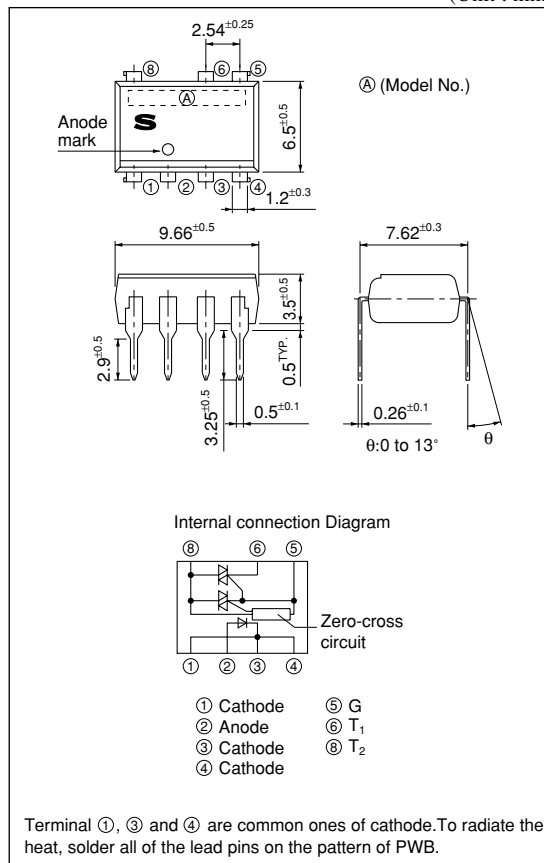
*2 50Hz sine wave

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

8-Pin DIP Type SSR for Low Power Control

■ 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 =0.6A	–	–	3.0	V
			I _T =0.9A				
	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
	Zero-cross voltage	V _{OX}	I _F =10mA, R load	–	–	35	V
Transfer characteristics	Minimum trigger current	I _{FT}	V _D =6V, R _L =100Ω	–	–	5	mA
	Isolation resistance	R _{ISO}	DC=500V, 40 to 60%RH _F	5×10 ¹⁰	10 ¹¹	–	Ω
	Turn-on time	t _{on}	V _D =6V, R _L =100Ω, I _F =10mA	–	–	50	μs

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

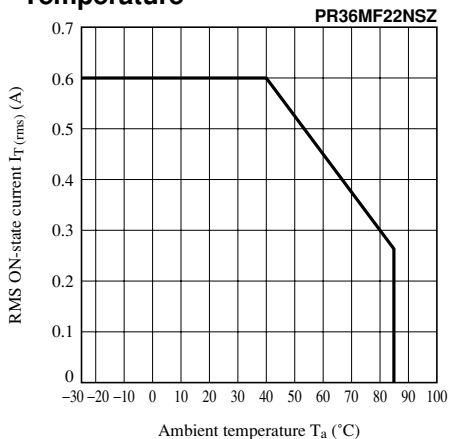


Fig.2 RMS ON-state Current vs. Ambient Temperature

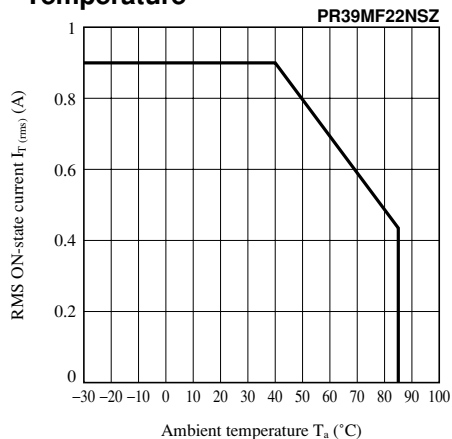
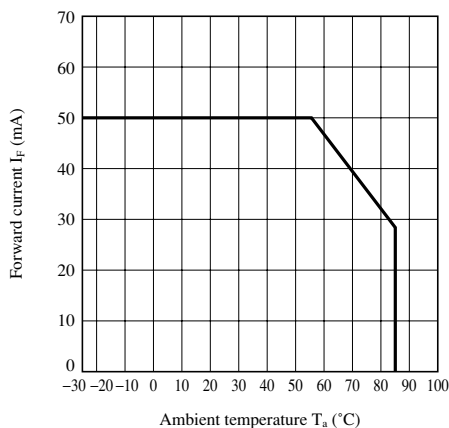


Fig.3 Forward Current vs. Ambient Temperature



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