Under development	
New product	●

PC3SD11YTZDF Phototriac Coupler

Low Input Drive Type Phototriac Coupler

■ Features

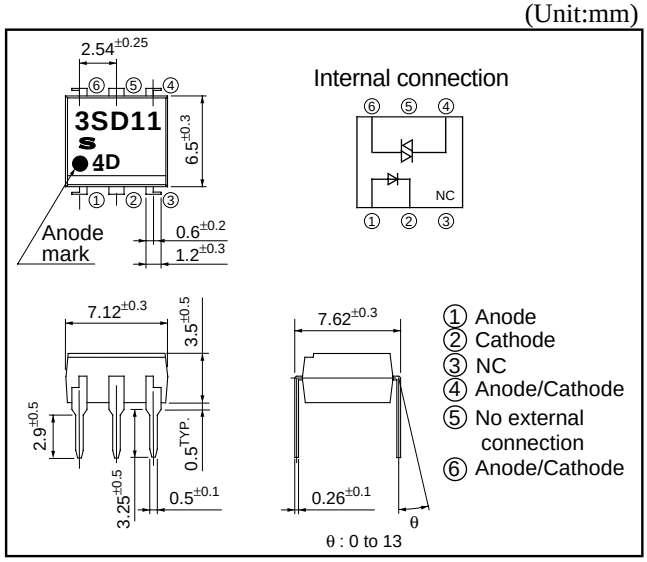
(1) Low input drive
(Minimum trigger current : MAX. 3 mA)
(2) High repetitive peak OFF-state voltage (V_{DRM} : 600 V)
(3) High isolation voltage (Viso(rms) : 5 000V)
(4) Recognized by UL1577(double protection isolation)
Approved by CSA
Approved by VDE(DIN EN60747-5-2)
{as model No. "**3SD11**"}
(6) Lead-free components (adaptable to RoHS directive)

■ Applications

(1) OA equipment
(2) FA power supply
(3) Vending machine
(4) SSRs

■ Outline Dimensions

(Unit:mm)



■ Absolute Maximum Ratings

(Ta=25 °C)

Parameter		Symbol	Ratings	Unit
Input	Forward current	I_F	50	mA
	Reverse voltage	V_R	6	V
Output	RMS ON-state current	I_T(rms)	100	mA
	*1 Peak one cycle surge current	Isurge	1.2	A
	Repetitive peak OFF-state voltage	V_{DRM}	600	V
*2	Isolation voltage	Viso(rms)	5.0	kV
	Operating temperature	Topr	-30 to +100	°C
	Storage temperature	Tstg	-55 to +125	°C
*3	Soldering temperature	Tsol	260	°C

*1 50Hz sine wave
*2 AC for 1 minute, RH=40 to 60%, f=60Hz
*3 For 10s

■ Electro-optical Characteristics

(Ta=25 °C)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V_F	I_F=20 mA	–	1.2	1.4	V
	Reverse current	I_R	V_R=3 V	–	–	10^{-5}	A
Output	Repetitive peak OFF-state current	I_{DRM}	V_D=V_{DRM}	–	–	10^{-6}	A
	ON-state voltage	V_T	I_T=0.1 A	–	–	2.5	V
	Holding current	I_H	V_D=6 V	0.1	–	3.5	mA
	Critical rate of rise of OFF-state voltage	dV/dt	V_D=1/√2 • V_{DRM}	1 000	–	–	V/μs
Transfer characteristics	Minimum trigger current	I_{FT}	V_D=6 V, R_L=100 Ω	–	–	3	mA
	Isolation resistance	R_{ISO}	DC=500 V, 40 to 60 %RH	5×10^{10}	10^{11}	–	Ω
	Turn-on time	t_{on}	V_D=6 V, R_L=100 Ω, I_F=10 mA	–	–	100	μs

As of April 2004