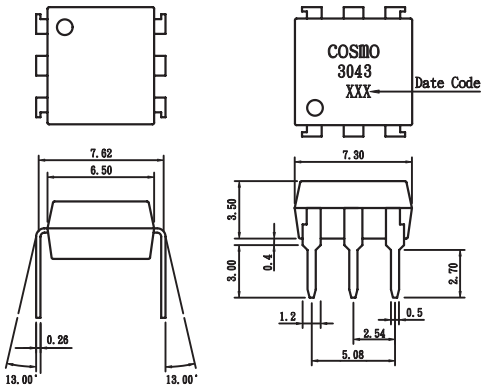
High Reliability Photocoupler KMOC3043

UL 1577 (File No.E169586) **VDE** EN60747-5-2 / EN60950 / EN60065 (File No.40009235)

For 115/240 Vac (rms) Application:

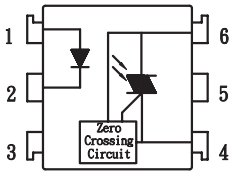
1. Solenoid/Valve Controls.
2. Lighting Controls.
3. Static Power Switches.
4. AC Motor Drives.
5. Temperature Controls.
6. E. M. Contactors.
7. AC Motor Staters.
8. Solid State Relays.

Outside Dimension:Unit (mm)



TOLERANCE :± 0.2mm

Schematic:Top View



1. Anode
2. Cathode
3. NC
4. MAIN TERMINAL
5. SUBSTRATE DO NOT CONNECT
6. MAIN TERMINAL

Absolute Maximum Ratings

(Ta=25℃)

	Parameter	Symbol	Rating	Unit
Input	Forward current	I_F	50	mA
	Peak forward current	I_{FM}	1	A
	Reverse voltage	V_R	6	V
	Power dissipation	P_D	70	mW
Output	Off-State Output Terminal voltage	V_{DRM}	400	Vpeak
	Peak Repetitive Surget Current	I_{TSM}	6	A
	Power dissipation	P_D	300	mW
	Total power dissipation	Ptot	330	mW
	Isolation voltage 1 minute	Viso	5000	Vrms
	Operating temperature	Topr	-40 to +80	℃
	Storage temperature	Tstg	-40 to +125	℃
	Soldering temperature 10 seconds	Tsol	260	℃

Electro-optical Characteristics

(Ta=25℃)

	Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage	V_F	I_F=10mA		1.2	1.5	V
	Reverse Leakage Current	I_R	V_R=4V			10	μA
Output	Peak Blocking Current	I_{DRM}	V_{DRM}=Rated		60	500	nA
	ON-State Voltage	V_{TM}	I_{TM}=100mA		1.8	3	V
	Critical rate of rise of OFF-state voltage	dV/dt		600			V/μS
Transfer characteristics	Holding Current	I_H			100		μA
	Inhibit Voltage (MT1-MT2 Voltage above which device not trigger.)	V_{INH}	I_F=5mA		5	20	V
	Leakage in Inhibited State	I_{DRM2}	I_F=Rated I_{FT}, Rated V_{DRM}, Off State			500	μA
	Isolation resistance	Riso	DC500V	$5x10^{10}$	10^{11}		ohm
	Minimum trigger current	I_{FT}	Main Terminal Voltage=3V			5	mA

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Fig.1 On-State Characteristics

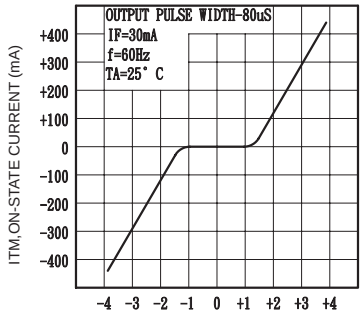

Fig.2 Inhibit Voltage versus Temperature

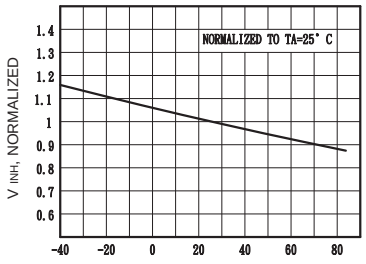

Fig.3 Leakage with LED Off versus Temperature

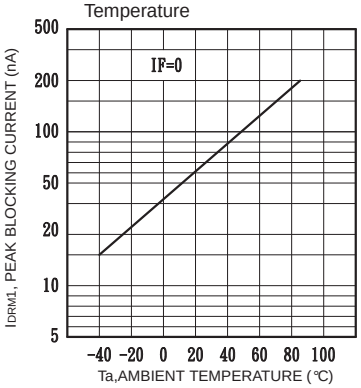

Fig.4 IDRM2 ,Leakage in Inhibit State versus Temperature

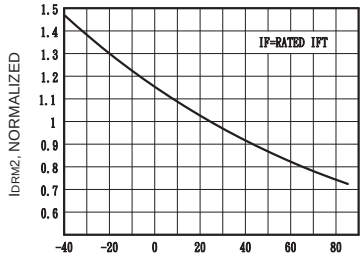

Fig.5 Trigger Current versus Temperature