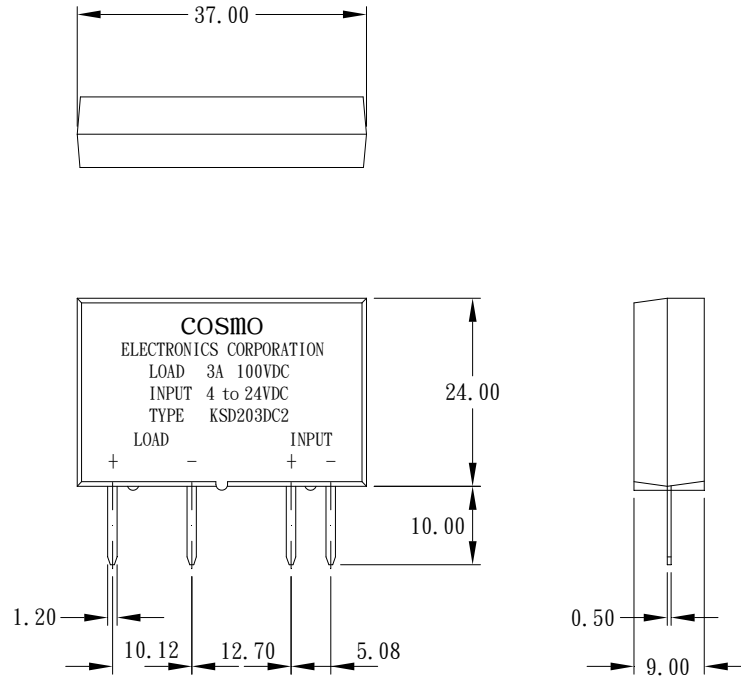


# PRODUCT SPECIFICATION

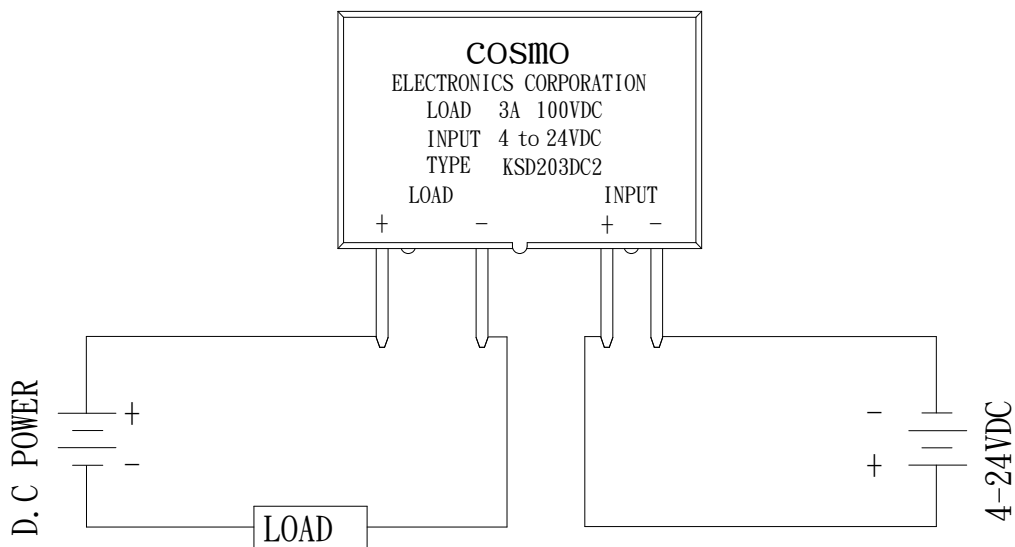
DATE: 05/27/11'

<b>cosmo</b> ELECTRONICS CORPORATION	SOLID STATE RELAY :	NO. 58021103	REV.
	<b>KSD203DC2</b>	SHEET 1 OF 2	4

## 1. OUTSIDE DIMENSION : UNIT ( mm )



## 2. SCHEMATIC : TOP VIEW



# PRODUCT SPECIFICATION

DATE: 05/27/11'

<b>cosmo</b> ELECTRONICS CORPORATION	SOLID STATE RELAY :	NO. 58011203	REV.
	<b>KSD203DC2</b>	SHEET 2 OF 2	4

### 3. Absolute Maximum Ratings

Parameter		Symbol	Rating	Unit
Input	Input signal voltage	V <sub>IN</sub>	4~24	VDC
	Drop-out voltage	V <sub>do</sub>	1	VDC
Output	Output power dissipation	P <sub>c</sub>	30	W
	Collector voltage	V <sub>CEO</sub>	100	V
	Output current	I <sub>o</sub>	3	A
Peak surge current 50us		I <sub>surge</sub>	9	A
Isolation voltage		V <sub>iso</sub>	4000	V <sub>rms</sub>
Operating temperature		T <sub>opr</sub>	-30~100	°C
Storage temperature		T <sub>stg</sub>	-30~125	°C
Soldering temperature 10 sec		T <sub>sol</sub>	260	°C

### 4. Electrical Characteristics

Parameter		Symbol	Conditions	MIN	TYP	MAX	Unit
Input	Pick-up voltage	V <sub>pu</sub>	I <sub>t</sub> =1Arms			4	VDC
	Input current	I <sub>in</sub>	V <sub>in</sub> =4~24V			25	mA
	Terminal capacitance	C <sub>T</sub>	V=0, f=1KHz		30		pF
Output	Collector-emitter breakdown voltage	BV <sub>CEO</sub>	I <sub>F</sub> =0	100			
	Output leak current	I <sub>leak</sub>	V=30V, I <sub>F</sub> =0			15	uA
Collector current		I <sub>C</sub>	I <sub>F</sub> =1mA, V <sub>CE</sub> =2V	0.05		3	A
Collector-emitter saturation voltage		V <sub>CE (sat)</sub>	I <sub>F</sub> =5mA, I <sub>C</sub> =100mA			2.0	V
Isolation resistance		R <sub>iso</sub>	DC500V	10			GΩ
Floating capacitance		C <sub>r</sub>	V=0, f=1MHz			3	pF
Cut-off frequency		F <sub>C</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =200mA R <sub>L</sub> =100Ω	2			KHz
Response time(Rise)		T <sub>r</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =20mA			500	uS
Response time(Fall)		T <sub>f</sub>	R <sub>L</sub> =100Ω			200	uS