

# For AD/DC Load General-purpose Type Optical MOS Relay

OCM2 □ 6, 2 □ 7 series


- ON resistance ▶ 2~33 Ω
- Load current ▶ 350~120 mA
- Recommended input current ▶ 10 mA

## Absolute maximum ratings


(Ambient temperature: Ta=25°C)

		Product name			OCM206 OCM207	OCM216 OCM217	OCM226 OCM227	OCM236 OCM237	OCM246 OCM247
	Item	Symbol	Condition	Unit					
Input characteristics	Continuous forward current	I <sub>F</sub>		mA	50				
	Derating factor of continuous forward current	ΔI <sub>F</sub>		mA/°C	Refer to [Derating Factor of Continuous Forward current] of characteristics data				
	Peak forward current	I <sub>FM</sub>	Pulse width 100 μs Cycle 10ms	A	0.5				
	Reverse voltage	V <sub>R</sub>		V	5				
	Power dissipation	P <sub>DL</sub>		mW	75				
Output characteristics	Load voltage	V <sub>OFF</sub>		V	60	100	200	350	400
	Load current	I <sub>ON</sub>		mA	350	300	200	140	120
	Derating factor of load current	ΔI <sub>ON</sub>		mA/°C	Refer to [Derating Factor of Load Current] of characteristics data				
	Surge load current	I <sub>SUG</sub>	Pulse width 1ms 1shot	A	1.0			0.8	0.7
	Power dissipation	P <sub>D</sub>		mW	300				
	Total power dissipation	P <sub>tot</sub>		mW	325				
	Isolation voltage	V <sub>IO</sub>		V(rms)	1500				
					OCM206	OCM216	OCM226	OCM236	OCM246
					4000				
					OCM207	OCM217	OCM227	OCM237	OCM247
	Operating temperature	T <sub>opr</sub>		°C	-40~+85				
	Storage temperature	T <sub>stg</sub>		°C	-40~+100				

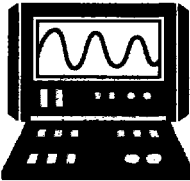
### APPLICATIONS




Automatic meter reading system



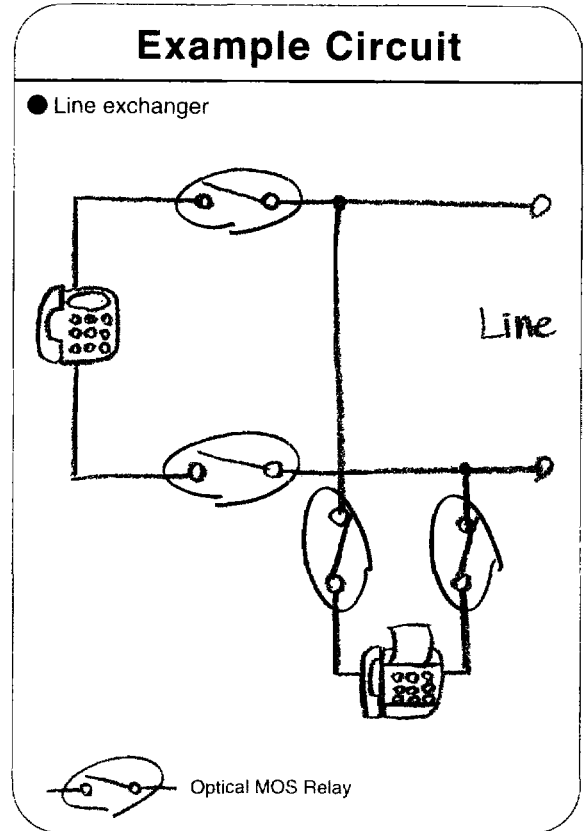
Modem



Measurement equipment



Karaoke on demand (modem)



### Electrical characteristics

(Ambient temperature Ta=25°C)

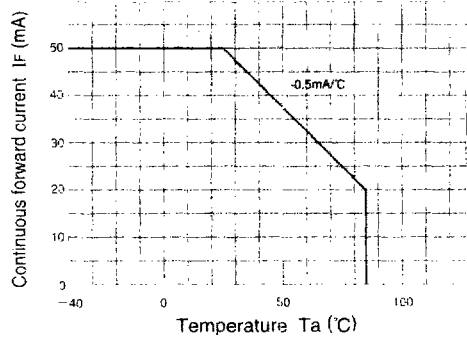
Product name					OCM206 OCM207	OCM216 OCM217	OCM226 OCM227	OCM236 OCM237	OCM246 OCM247	
Item	Symbol	Condition		Unit						
Input characteristics	Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	MIN			1.0			
				MAX			1.3			
	Reverse current	I <sub>R</sub>	V <sub>R</sub> =5V	MAX	μA		10			
	Operation input current <sup>*1</sup>	I <sub>FA</sub>	I <sub>ON</sub> =100mA	MAX	mA		5			
	Recovery input current	I <sub>FR</sub>	V <sub>OFF</sub> =Rating I <sub>ON</sub> =100 μA	MIN	mA		0.2			
Output characteristics	On-resistance	R <sub>ON</sub>	I <sub>F</sub> =10mA I <sub>ON</sub> =Rating <small>Time to flow current is within one second</small>	MIN		1.0	2.0	4.0	7.0	10
				TYP		2.0	3.0	7.0	17	22
				MAX		3.0	4.0	10	24	33
	Off-state leakage current <sup>*2</sup>	I <sub>OFF</sub>	V <sub>OFF</sub> =Rating	MAX	μA		1.0			
	Output terminal capacitance	C <sub>OUT</sub>	V <sub>OFF</sub> =50V f=1MHz	TYP	pF	35	25	15	12	10
Coupling characteristics	Input-to-output capacitance	C <sub>IO</sub>	f=1MHz	TYP	pF			1.3		
	Turn on time <sup>*3</sup>	t <sub>on</sub>	I <sub>F</sub> =10mA I <sub>ON</sub> =100mA	TYP	ms			0.3		
				MAX				1.0		
Turn off time <sup>*3</sup>	t <sub>off</sub>	I <sub>ON</sub> =50mA	TYP	ms			0.2			
			MAX				1.0			

\*1: Can correspond to special specification I<sub>FA</sub><3.0mA

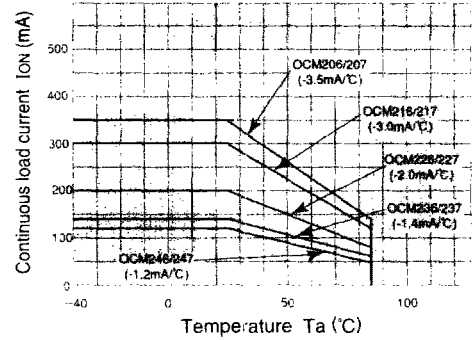
\*2: Can correspond to special specification I<sub>OFF</sub><1.0nA

\*3: Can correspond to special specification t<sub>on</sub>/t<sub>off</sub><0.5ms

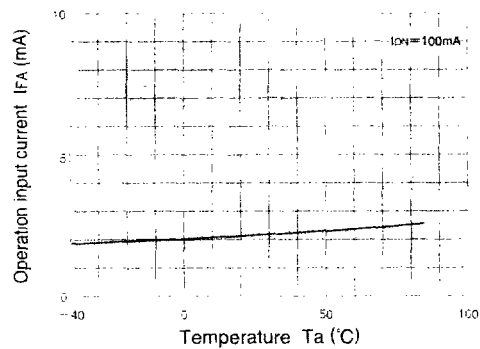
# OCM2 6, 2 7 series Characteristics Curves



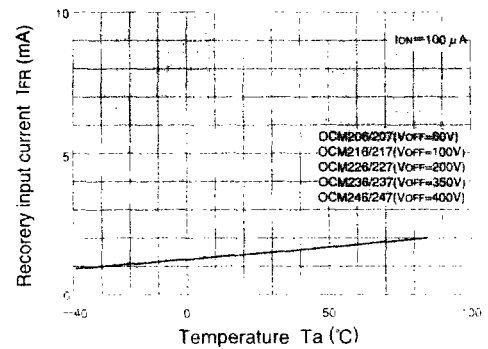
**Derating factor of continuous forward current**



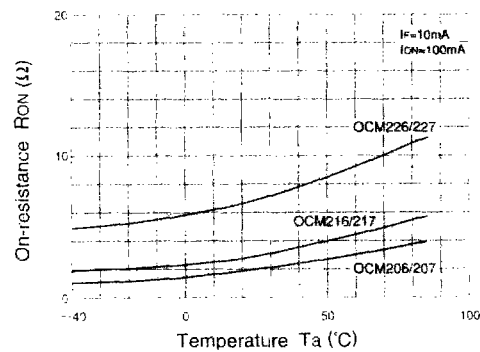
**Derating factor of load current**



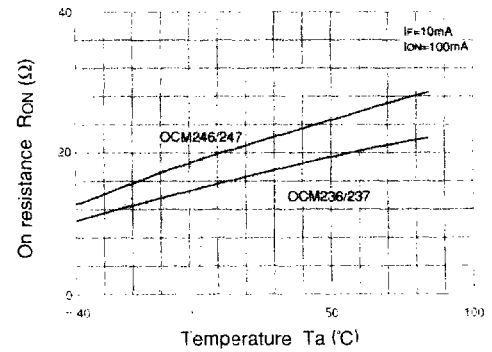
**Operation input current vs. Ambient temperature**



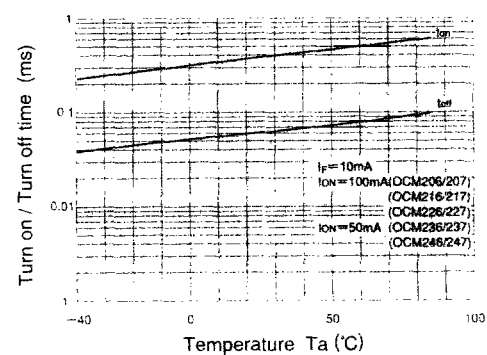
**Recovery input current vs. Ambient temperature**



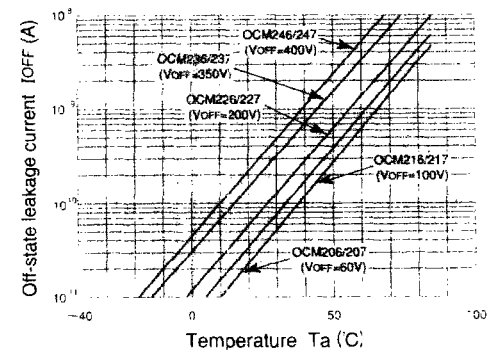
**On-resistance vs. Ambient temperature-1**



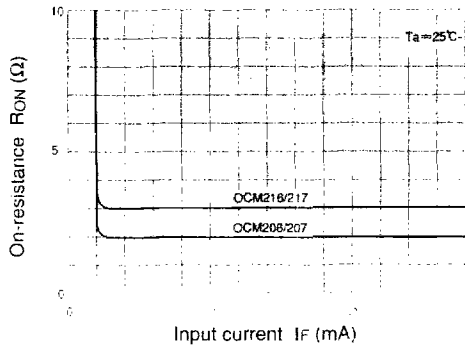
**On-resistance vs. Ambient temperature-2**



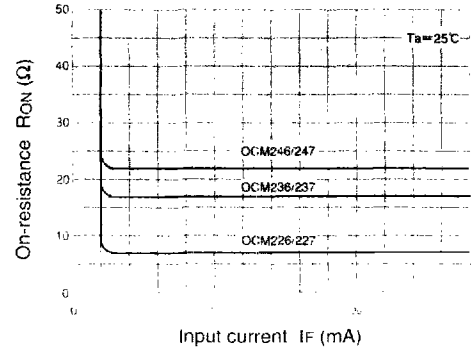
**Turn on/Turn off time vs. Ambient temperature**



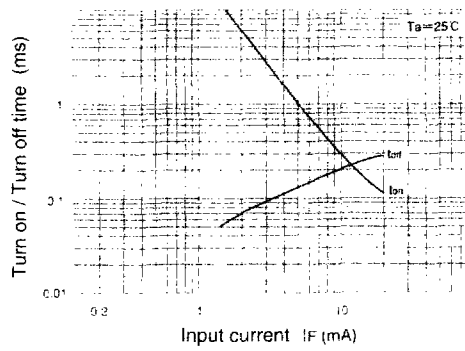
**Off-state leakage current vs. Ambient temperature**



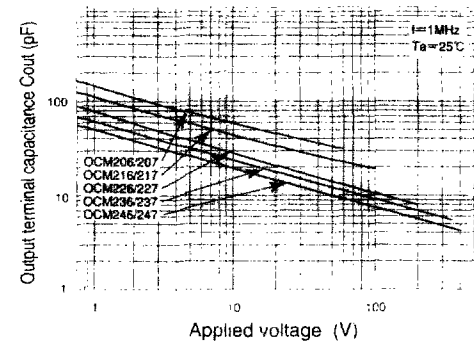
**Continuous forward current vs. On-resistance-1**



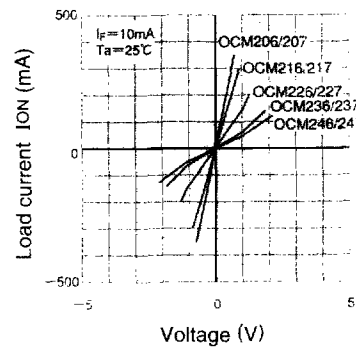
**Continuous forward current vs. On-resistance-2**



**Continuous forward current vs. Turn on/Turn off time**



**Output terminal capacitance vs. Applied voltage**



**Load current vs. Voltage**