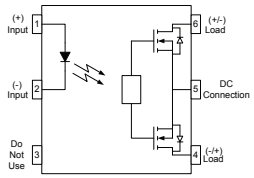
Parameter	Symbol	Rating	Units
Load Voltage	V_L	60	V
Load Current	I_L	3	A
On-Resistance	R_{on}	0.4	Ω
On-Resistance	V/IO	3750	Vrms

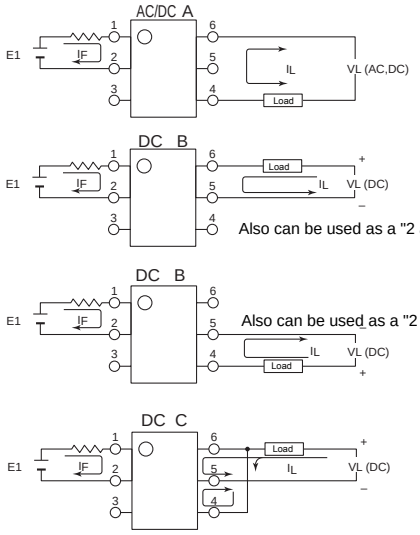
E534710


SMD-6


DIP-6



1. LED Anode
2. LED Cathode
4. Drain (MOS FET)
5. Source (MOS FET)
6. Drain (MOS FET)



APSEMI PhotoRelays

APSEMI Photorelays are the most reliable, technically advanced logic-to-power interface devices. Their basic function is to take a low current signal from a microprocessor to control the switching of both AC and DC loads, while providing an isolation barrier between logic and power.
While this function is common to all relays, Photorelays provide distinct advantages over their mechanical counterparts including:

- Long life (No limit on mechanical and electrical
- lifetime)Bounce-free switching
- Higher speed and high frequency switching
- Higher sensitivity (less power consumption)
- Immunity to EMI or RFI
- No have voltaic arc, bounce, and noise More
- resistant to vibration and impact AC or DC load
- switching
- Small package size

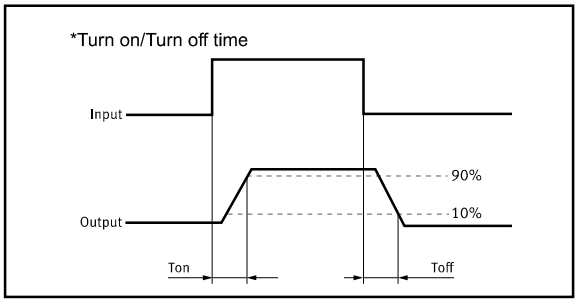
Applications

These advantages make APSEI Photorelays the ideal choice for:

- Telecom/Datacom switching
- Multiplexers
- Meter reading systems
- Data acquisition
- Medical equipment
- Battery monitoring
- I/O Sub-Systems
- Robotics
- Aerospace
- Home/Safety security systems
- Process Control
- Energy Management
- Reed Relay EMR Replacement
- Programmable Controllers

TPYES

Category	Output Rating		Package	Part No.	Packing Quantity
	Load Voltage	Load Current			
AC/DC	60V	3A	DIP-6	APV252G3E	50pcs /tube
			SMD-6	APV252G3EH	1000pcs /reel



Absolute Maximum Ratings (Ta = 25°C)

Item		Symbol	Value	Units	Note
Input	Continuous LED Current	I_F	50	mA	
	Peak LED Current	I_{FP}	500	mA	f=100Hz, duty=1%
	LED Reverse Voltage	V_R	5	V	
	Input Power Dissipation	P_{In}	75	mW	
Output	Load Voltage	V_L	60	V(AC peak or DC)	
	Load Current	I_L	3	A	
	Peak Load Current	I_{Peak}	6.0	A	100ms(1 pulse)
	Output Power Dissipation	Pout	500	mW	
Total Power Dissipation		P_T	550	mW	
I/O Breakdown Voltage		$V_{I/O}$	3750	Vrms	RH=60%, 1min
Operating Temperature		T_{opr}	-40 to 85	℃	
Storage Temperature		T_{stg}	-40 to 100	℃	
Pin Soldering Temperature		T_{sol}	260	℃	10 sec max.

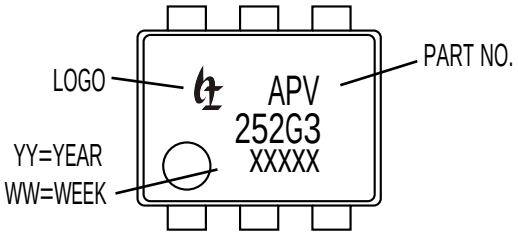
Electrical Characteristics (Ta = 25°C)

Item		Symbol	MIN.	TYP.	MAX.	Units	Conditions
Input	LED Forward Voltage	V_F		1.3	3.0	V	I_F=10mA
	Operation LED Current	I_{Fon}		1.2	2.0	mA	
	Recovery LED Current	I_{Foff}		0.3	0.9	mA	
	Recovery LED Voltage	V_{Foff}	0.7			V	
Output	On-Resistance	R_{on}		0.04	0.052	Ω	I_F=5mA, I_L=Rating, Time to flow is within 1 sec.
	Off-State Leakage Current	I_{Leak}			1.0	uA	V_L=Rating
	Output Capacitance	C_{out}		500		pF	V_L=0, f=1MHz
Transmission	Turn-On Time	T_{on}		0.8	5.0	ms	I_F=10mA, I_L=100mA,
	Turn-Off Time	T_{off}		0.1	1.0	ms	
Coupled	I/O Isolation Resistance	$R_{I/O}$	10^{10}			Ω	DC500V
	I/O Capacitance	$C_{I/O}$		0.8	1.3	pF	f=1MHz

Dimensions and DIP-6 Package

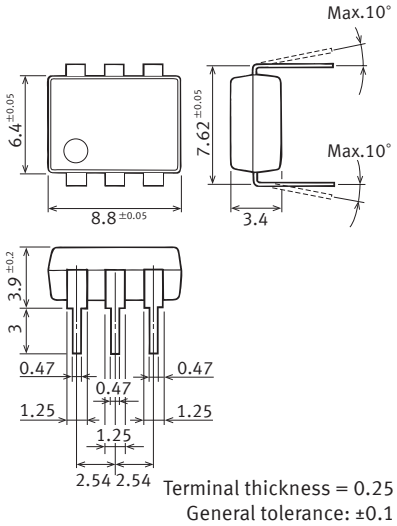
Unit: mm

Marking



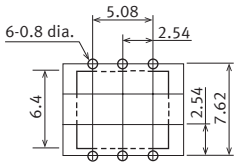
Lable

Through hole terminal type



Terminal thickness = 0.25
General tolerance: ±0.1

PC board pattern (Bottom view)

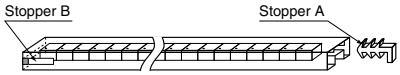


Tolerance: ±0.1

DIP Tape dimensions

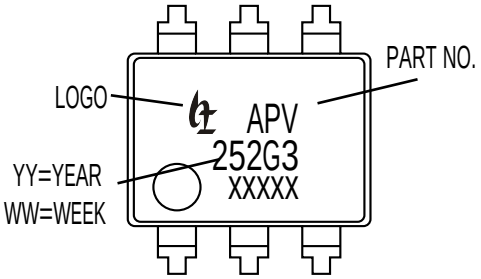
Unit : mm

Devices are packaged in a tube so that pin No. 1 is on the stopper B side. Observe correct orientation when mounting them on PC boards.



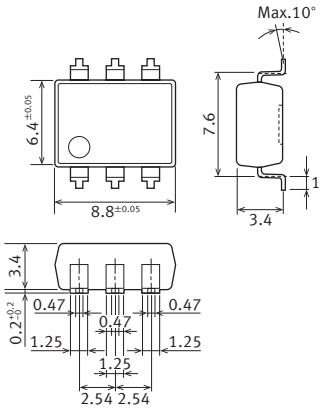
Dimensions and SMD-6 Package Unit: mm

Marking



Lable

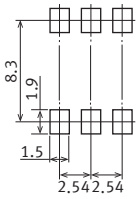
Surface mount terminal type



Terminal thickness = 0.25
General tolerance: ±0.1

Recommended mounting pad

(Top view)



Tolerance: ±0.1

Tape dimensions (tape reel)