

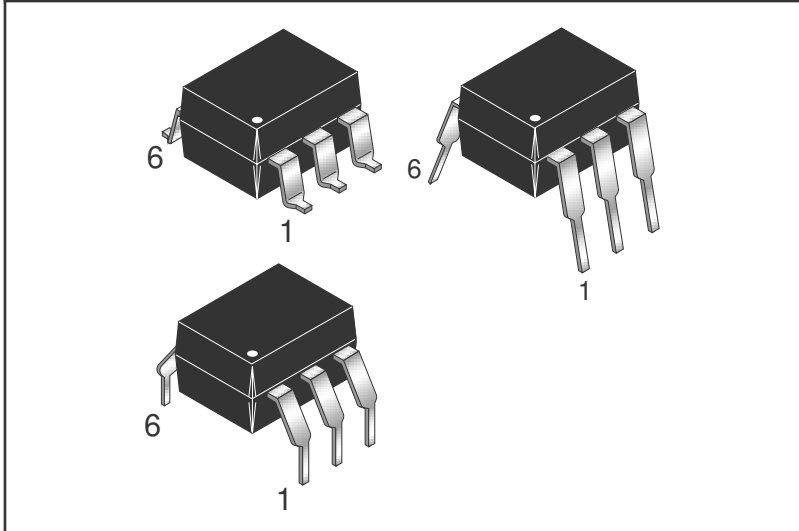
SL5500

SL5501

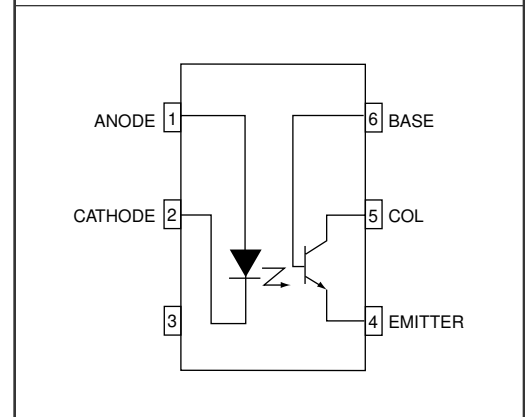
SL5504

SL5511

PACKAGE



SCHEMATIC



DESCRIPTION

The SL5500, SL5501, SL5504 and SL5511 are optically coupled isolators each consisting of an infrared emitting GaAs diode and a silicon NPN phototransistor with accessible base. These devices are housed in 6-pin dual-in-line packages (DIP).

FEATURES

- High output/input DC current transfer ratio
- Low saturation voltage
- High isolation voltage of 5.3 kV RMS
- UL recognized (File # E90700)
- VDE recognized (File # 94766)
- Ordering option '300' (e.g. SL5500.300)

APPLICATIONS

- Power supply regulators
- Digital logic inputs
- Microprocessor inputs
- Appliance sensor systems
- Industrial controls

SL5500

SL5501

SL5504

SL5511

Parameters		Symbol	Value	Units
TOTAL DEVICE				
Storage Temperature		T_{STG}	-55 to +150	°C
Operating Temperature		T_{OPR}	-55 to +100	°C
Lead Solder Temperature		T_{SOL}	260 for 10 sec	°C
Total Power Dissipation at $T_A = 25^\circ\text{C}$ Ambient Derate Linearly from 25°C		P_D	260	mW
			3.3	mW/°C
EMITTER				
Continuous Reverse Voltage		V_R	3	V
Continuous Forward Current		I_F	100	mA
Forward Current - Peak (10 μs pulse, $\delta = 0.01$)		$I_F(\text{pk})$	3.0	A
Total Power Dissipation $T_A = 25^\circ\text{C}$ Ambient Derate Linearly from 25°C		P_D	150	mW
			2.0	mW/°C
DETECTOR				
Collector to Emitter Voltage (open base)	SL5500, SL5501, SL5511	V_{CEO}	30	V
	SL5504		80	
Collector to Base Voltage (open emitter)	SL5500, SL5501, SL5511	V_{CBO}	70	V
	SL5504		120	
Emitter to Collector Voltage (open base)		V_{ECO}	7	V
Emitter to Base Voltage (open collector)		V_{EBO}	7	V
DC Collector Current		I_C	100	mA
Detector Power Dissipation @ $T_A = 25^\circ\text{C}$ Ambient Derate Linearly from 25°C		P_D	150	mW
			2.0	mW/°C