

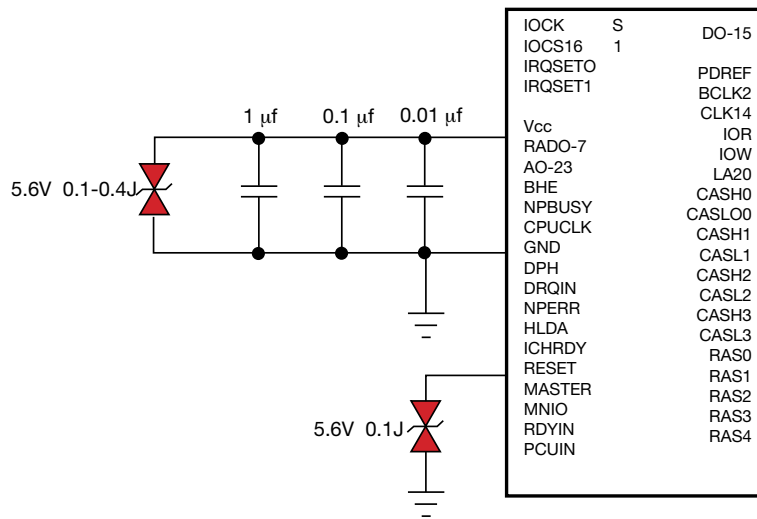
AVX TransGuard[®]

TYPICAL CIRCUITS REQUIRING PROTECTION

The following applications and schematic diagrams show where TransGuards[®] might be used to suppress various transient voltages:

- ASIC Reset & Vcc Protection
- Micro Controllers, Relays, DC Motors
- I/O Port Protection
- Keyboard Protection
- Modem Protection
- Sensor Protection
- Preamplifier Protection
- Audio Circuit Protection
- LCD Protection
- Optics Protection

ASIC RESET & V_{CC} PROTECTION

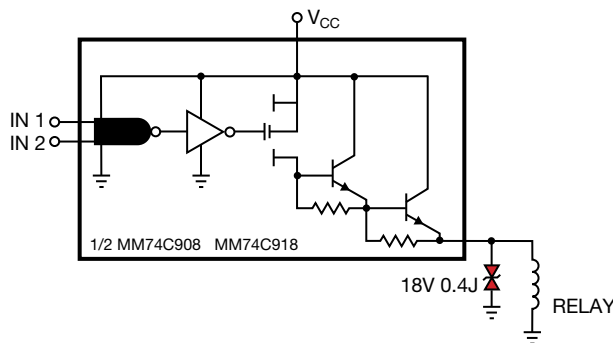


MICRO CONTROLLERS RELAYS, DC MOTORS

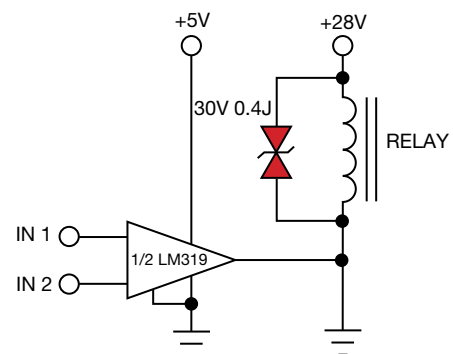
TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE ≥ RELAY OR MOTOR VOLTAGE
 ENERGY RATING TYPICALLY > 0.3J
 CAPACITANCE IS OF NO CONCERN

CMOS RELAY DRIVER



LM319 RELAY DRIVER

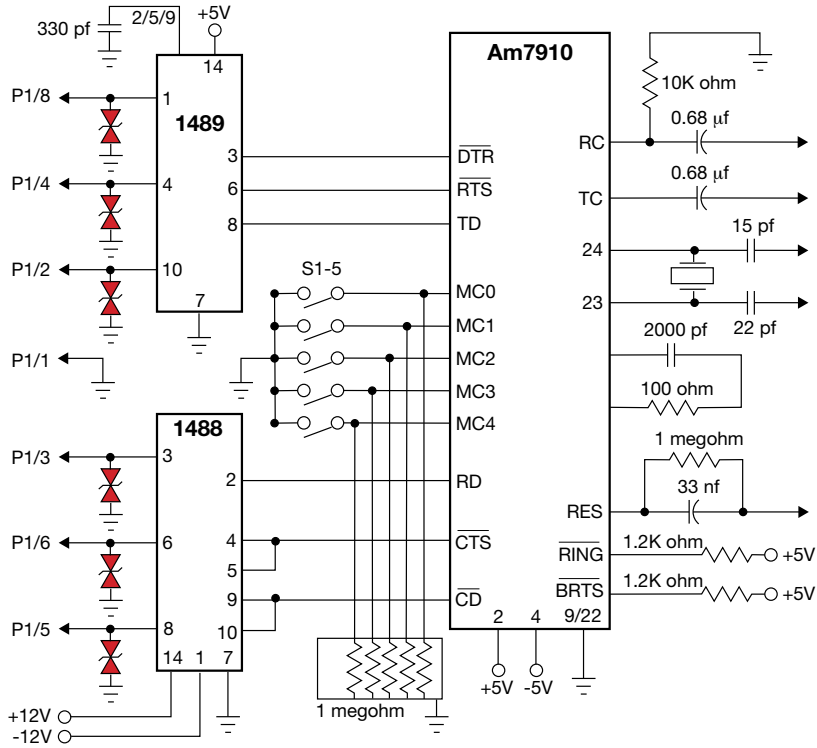


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MODEM PROTECTION

TRANSGUARD® CHARACTERISTICS

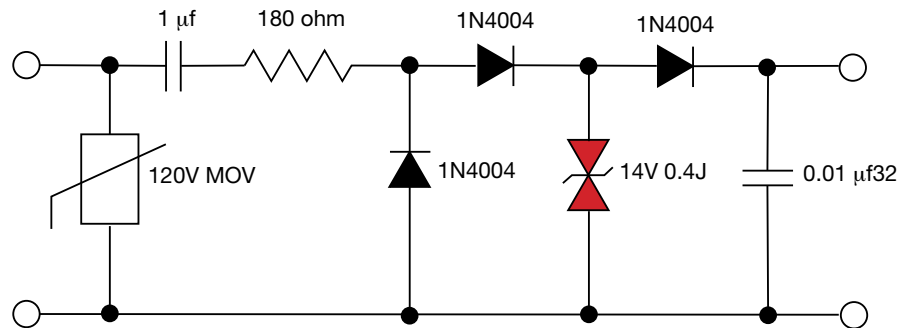
WORKING VOLTAGE <26V
ENERGY RATING ≥ 0.1J



SENSOR PROTECTION

TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE TYPICALLY >14V
ENERGY RATING > 0.4J
CAPACITANCE IS NO CONCERN



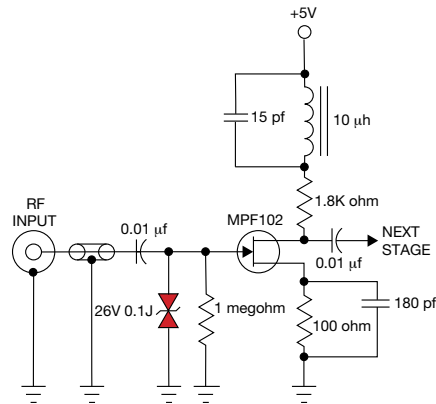
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ANTENNA AND PREAMPLIFIER PROTECTION

TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE TYPICALLY 18V - 26V
ENERGY RATING 0.05J - 0.9J
CAPACITANCE OF CONCERN ON MANY DESIGNS

PREAMPLIFIER PROTECTION

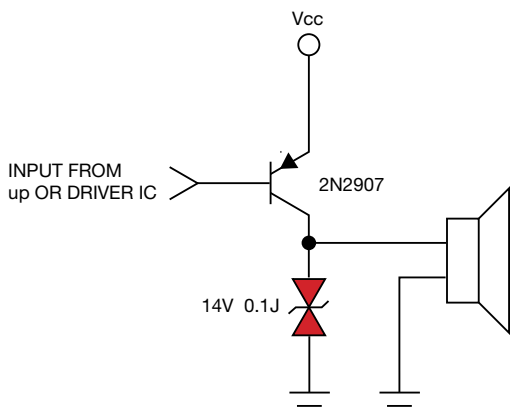


AUDIO CIRCUIT PROTECTION

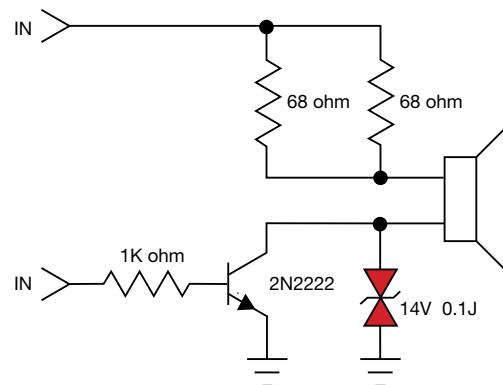
TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE TYPICALLY 14V - 18V
ENERGY RATING 0.1J

PAGER AUDIO PROTECTION



NOTEBOOK, WORK STATION AUDIO PROTECTION

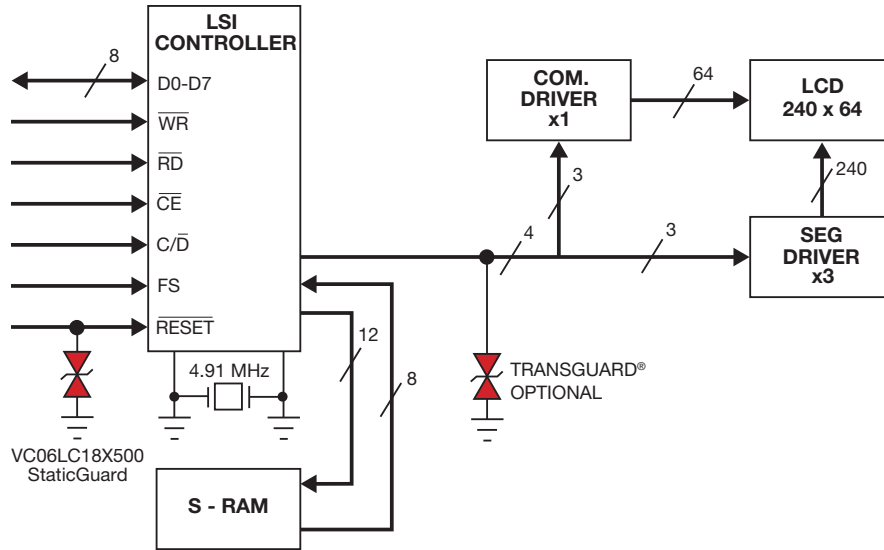


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LCD PROTECTION

TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE < 5.6V
ENERGY RATING < 0.1J

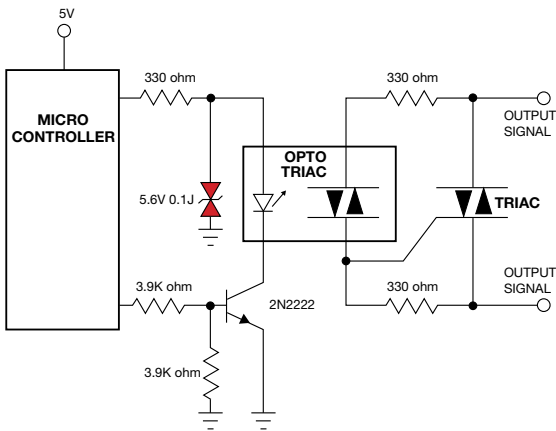


OPTICS PROTECTION

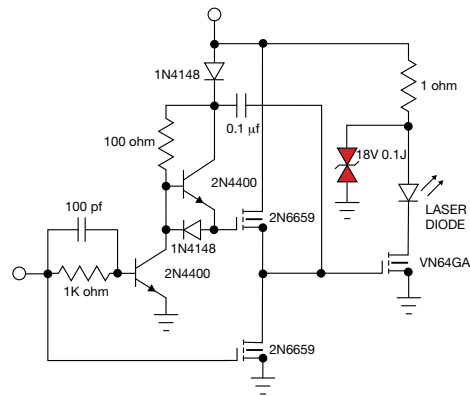
TRANSGUARD® CHARACTERISTICS

WORKING VOLTAGE ≤ 18V
ENERGY RATING 0.1J
CAPACITANCE SHOULD BE MINIMIZED

OPTO ISOLATER PROTECTION



LASER DIODE PROTECTION



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