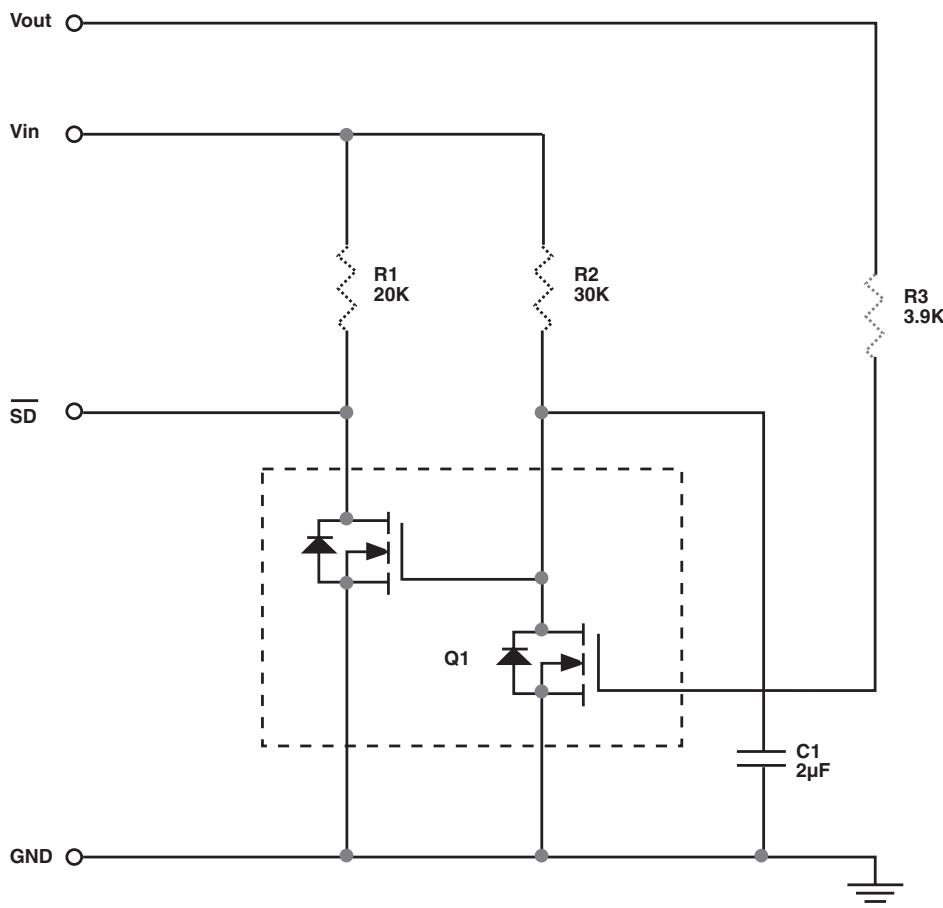


## Short Circuit Protection

Any accidental short between the output pin and the GND pin of the FunctionPAK could cause permanent damage to the device. Whether that short is the result of component fatigue, accumulation of dust or debris over time, or accidental shorting by technicians during system check-out, the results would be the same. The best way to protect this circuit is to limit the current automatically to a safe level or place a fast-blow fuse in the input circuit. If this option is not available in the system, here are two other ways to protect the FunctionPAK.

1. If the output voltage is 2.5 volts or above, connect the PWM pin directly to the output pin instead of to the input pin.
2. If the output voltage is below 2.5 volts, connect the following circuit to the FunctionPAK for short-circuit protection.



ITEM	QTY	DESIGNATOR	PART TYPE	DESCRIPTION	FOOTPRINT	MANUFACTURER
1	1	R1	20k	Resistor, 5%, 1/8W	0402	Vishay Dale
2	1	R2	30k	Resistor, 5%, 1/8W	0402	Vishay Dale
3	1	R3	3.9k	Resistor, 5%, 1/8W	0402	Vishay Dale
4	1	C1	2μF	Capacitor Ceramic 16V; 10%	0402	Vishay Vitramon
5	1	Q1	SI6966EDQ	Dual N-Ch. MOSFET	TSSOP-8	Vishay Siliconix