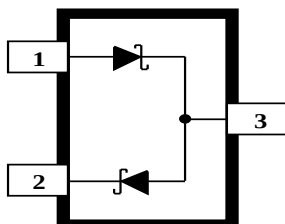


DUAL SCHOTTKY DIODE

Schottky barrier diodes combine high rectification efficiency with high switching speeds and low series resistance. The A8920SLR dual-diode is designed specifically for hard-disk drive applications requiring low voltage drop rectification of the spindle motor back-EMF during power-down head retraction. It is supplied in a 3-lead small-outline transistor package (SOT-23/TO-236AB) for surface-mounting for use over the operating temperature range of -20°C to $+85^{\circ}\text{C}$.

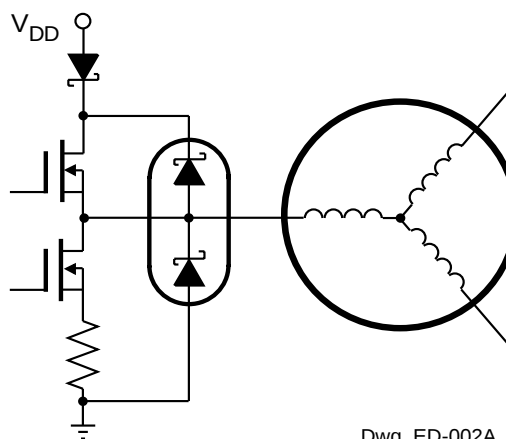
FEATURES

- Low Forward Voltage Drop 440 mV Typical at 150 mA
- 500 mA Forward Current
- 20 V Reverse Voltage



Dwg. PD-002

TYPICAL APPLICATION



Dwg. ED-002A

ABSOLUTE MAXIMUM RATINGS

at $T_A = +25^{\circ}\text{C}$

Forward Current, I_F 500 mA
 Reverse Voltage, V_R 20 V
 Operating Temperature Range,
 T_A -20°C to $+85^{\circ}\text{C}$
 Storage Temperature Range,
 T_S -65°C to $+150^{\circ}\text{C}$

Always order by complete part number: **A8920SLR**.

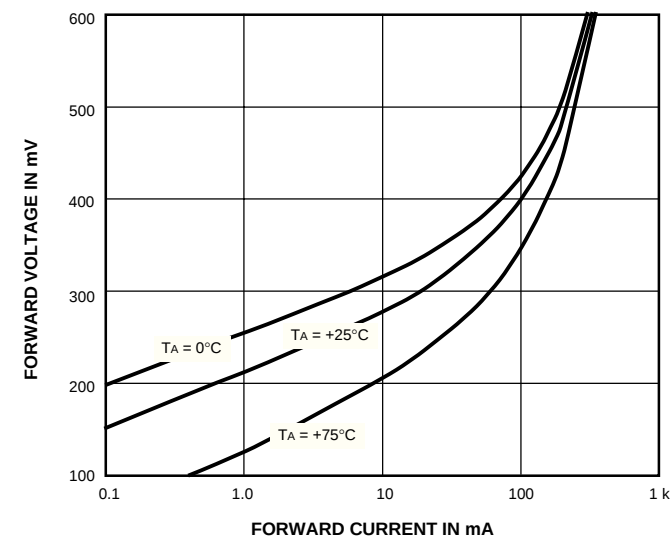
8920

DUAL SCHOTTKY DIODE

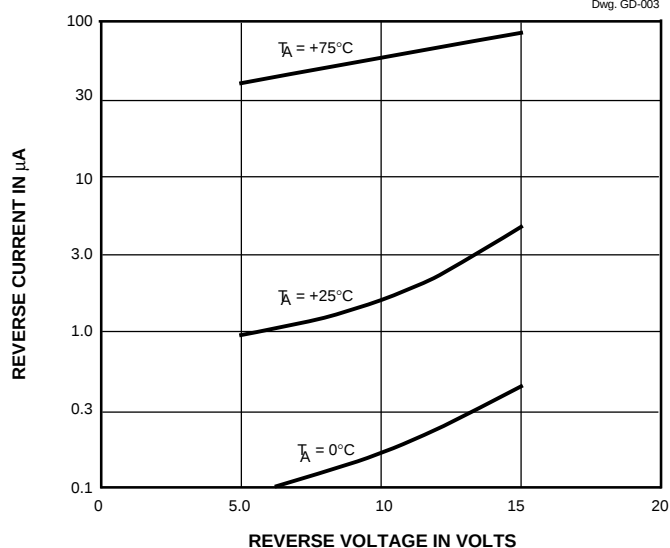
ELECTRICAL CHARACTERISTICS at $T_A = +25^\circ\text{C}$ (unless otherwise specified).

Characteristic	Symbol	Test Conditions	Limits			
			Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 100\ \mu\text{A}$	20	—	—	V
Reverse Leakage Current	I_R	$V_R = 10\ \text{V}$	—	1.6	20	μA
Forward Voltage	V_F	$I_F = 50\ \text{mA}$	—	346	400	mV
		$I_F = 150\ \text{mA}$	—	440	500	mV
Junction Capacitance	C_T	$V_R = 0\ \text{V}, f = 1\ \text{MHz}$	—	370	—	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 100\ \text{mA}$	—	32	—	ns

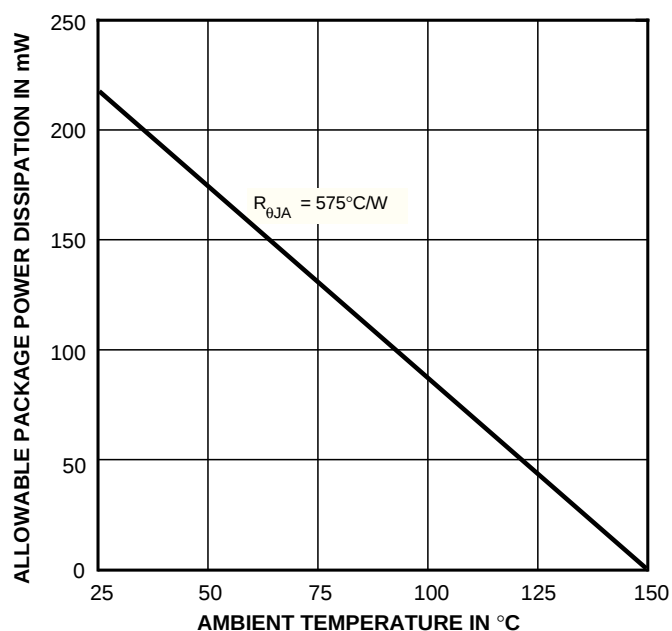
TYPICAL CHARACTERISTICS



Dwg. GD-003



Dwg. GD-004



Dwg. GD-002

Allegro MicroSystems, Inc. reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the design of its products.

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