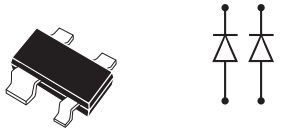
BAS28

DUAL, ISOLATED HIGH SPEED SILICON SWITCHING DIODES



SOT-143 CASE

Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BAS28 consists of two electrically isolated ultra-high speed silicon switching diodes manufactured by the epitaxial planar process and packaged in an epoxy molded SOT-143 surface mount case. This device is designed for high speed switching applications.

MARKING CODE: A61

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	500	mA
Forward Surge Current, tp=1 μs	I_{FSM}	4.0	A
Forward Surge Current, tp=1 ms	I_{FSM}	2.0	A
Forward Surge Current, tp=1 s	I_{FSM}	1.0	A
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J,T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	V_R=25V, T_A=150°C		30	μA
I_R	V_R=75V		1.0	μA
I_R	V_R=75V, T_A=150°C		50	μA
V_F	I_F=1.0mA		715	mV
V_F	I_F=10mA		855	mV
V_F	I_F=50mA		1.00	V
V_F	I_F=150mA		1.25	V
C_T	V_R=0, f=1.0 MHz		2.0	pF
t_{rr}	I_F=I_R=10mA, R_L=100Ω, Rec. to 1.0mA		6.0	ns
Q_s	I_F=10mA, V_R=5.0V, R_L=500Ω		45	pC
V_{FR}	I_F=10mA, t_r=20ns		1.75	V

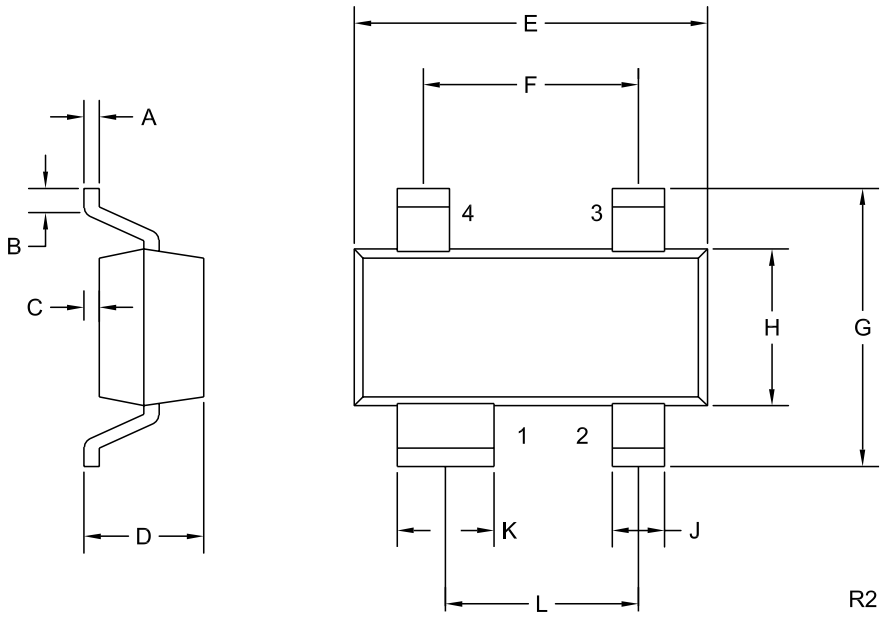
R4 (3-December 2003)

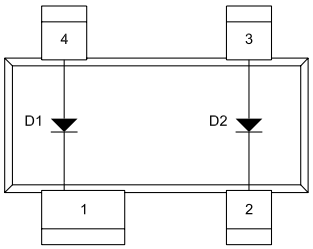
Central™
Semiconductor Corp.

BAS28

DUAL, ISOLATED HIGH SPEED
SILICON SWITCHING DIODES

SOT-143 CASE - MECHANICAL OUTLINE





LEAD CODE:
1) CATHODE D1
2) CATHODE D2
3) ANODE D2
4) ANODE D1

MARKING CODE: A61

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.003	0.006	0.08	0.15
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	-	0.045	-	1.14
E	0.110	0.120	2.79	3.04
F	0.075		1.90	
G	-	0.098	-	2.50
H	0.047	0.055	1.19	1.40
J	0.014	0.020	0.36	0.50
K	0.030	0.037	0.76	0.93
L	0.067		1.70	

SOT-143 (REV: R2)

R4 (3-December 2003)