

Silicon Dual Diode

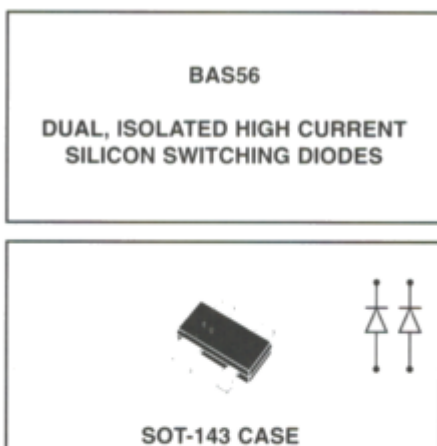
BAS56

60V / 200mA

DATASHEET

OEM – Central Semiconductor Corp.

Source: Central Databook 2004



DESCRIPTION:

The CENTRAL SEMICONDUCTOR BAS56 consists of two electrically isolated ultra-high speed silicon switching diodes manufactured by the epitaxial planar process and packaged in an epoxy molded surface mount SOT-143 case. This device is designed for high speed switching applications.

MARKING CODE: L51

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	60	V
Peak Repetitive Reverse Voltage	V _{RRM}	60	V
Continuous Forward Current	I _F	200	mA
Peak Repetitive Forward Current	I _{FRM}	400	mA
Forward Surge Current, t _p =1 μs	I _{FSM}	4.0	A
Forward Surge Current, t _p =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 =60V		100	nA
I _R	V _R =60V, T _A =150°C		100	μA
I _R	V _R =75V		10	μA
V _F	I _F =10mA		0.75	V
V _F	I _F =200mA		1.0	V
V _F	I _F =500mA		1.25	V
C _T	V _R =0, f=1.0 MHz		2.5	pF
t _{rr}	I _F =I _R =400mA, R _L =100Ω, Rec. to 40mA		6.0	ns
Q _s	I _F =10mA, V _R =5.0V, R _L =500Ω		50	pC
V _{FR}	I _F =400mA, t _r =30ns		1.2	V
V _{FR}	I _F =400mA, t _r =100ns		1.5	V

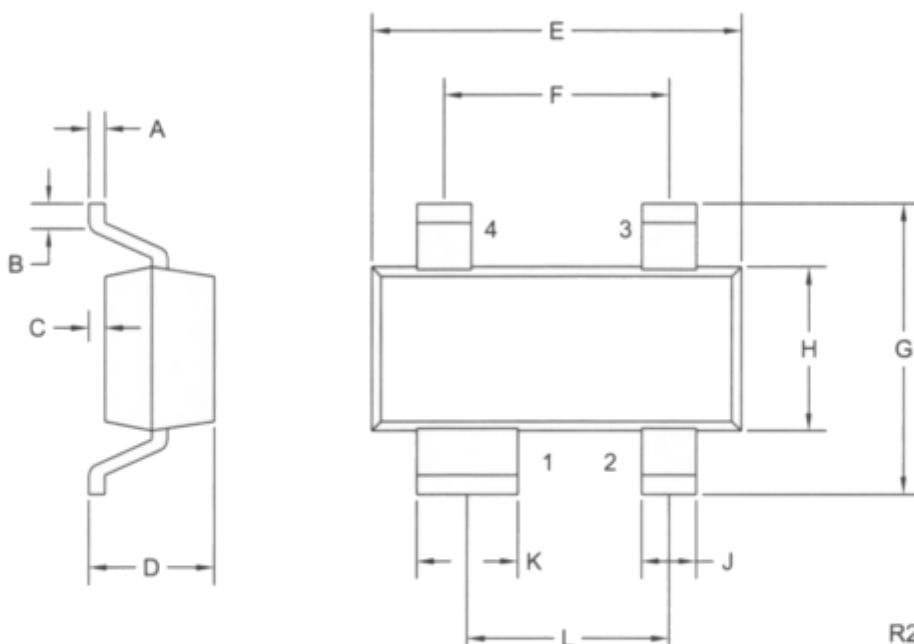
For Typical Electrical Characteristic Data for this device, please see Process CPD41 on page 880.



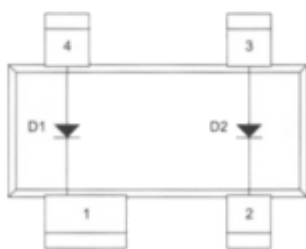
BAS56

DUAL, ISOLATED HIGH CURRENT SILICON SWITCHING DIODES

SOT-143 CASE - MECHANICAL OUTLINE



R2



LEAD CODE:

- 1) CATHODE D1
- 2) CATHODE D2
- 3) ANODE D2
- 4) ANODE D1

MARKING CODE: L51

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	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)

DATA SHEETS