

BAS56

**SURFACE MOUNT
DUAL, ISOLATED HIGH CURRENT
SILICON SWITCHING DIODES**



www.centrasemi.com

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 or WL5

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

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
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$	I_{FSM}	4.0	A
Peak Forward Surge Current, $t_p=1.0\text{s}$	I_{FSM}	1.0	A
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357	$^\circ\text{C/W}$

SYMBOL

V_R	60	V
V_{RRM}	60	V
I_F	200	mA
I_{FRM}	400	mA
I_{FSM}	4.0	A
I_{FSM}	1.0	A
P_D	350	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	357	$^\circ\text{C/W}$

UNITS

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

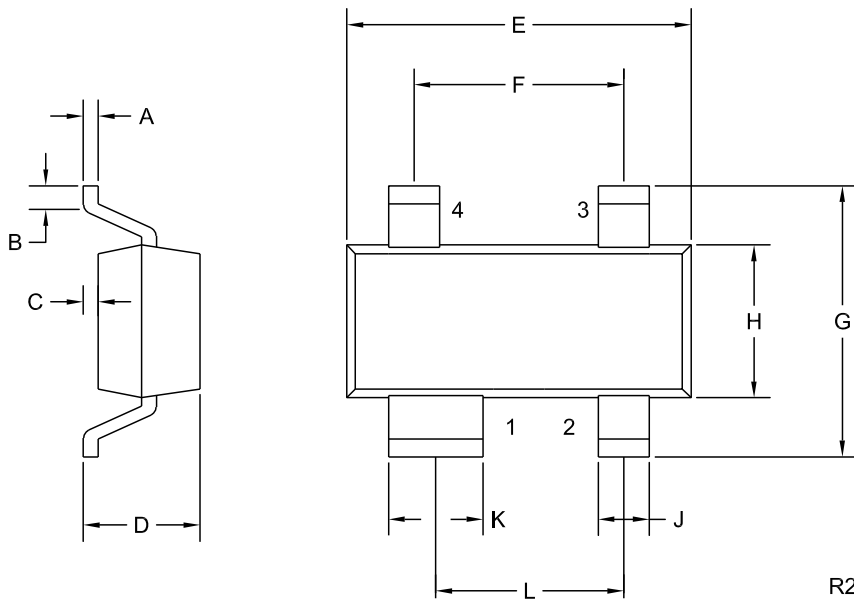
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=60\text{V}$		100	nA
I_R	$V_R=60\text{V}, T_A=150^\circ\text{C}$		100	μA
I_R	$V_R=75\text{V}$		10	μA
V_F	$I_F=10\text{mA}$		0.75	V
V_F	$I_F=200\text{mA}$		1.0	V
V_F	$I_F=500\text{mA}$		1.25	V
C_T	$V_R=0, f=1.0\text{MHz}$		2.5	pF
t_{rr}	$I_F=I_R=400\text{mA}, I_{rr}=40\text{mA}, R_L=100\Omega$		6.0	ns
Q_s	$I_F=10\text{mA}, V_R=5.0\text{V}, R_L=500\Omega$		50	pC
V_{FR}	$I_F=400\text{mA}, t_f=30\text{ns}$		1.2	V
V_{FR}	$I_F=400\text{mA}, t_f=100\text{ns}$		1.5	V

BAS56

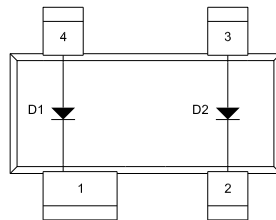
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SOT-143 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

MARKING CODE: L51 or WL5

SYMBOL	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)

R7 (25-August 2010)