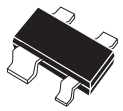
BAS56

DUAL HIGH CURRENT SWITCHING DIODE



SOT-143 CASE

Central™ Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR BAS56 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded surface mount package with isolated dual diodes, 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}	600	mA
Forward Surge Current, tp=1 μs	I_{FSM}	4.0	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=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

R3 (13-November 2002)

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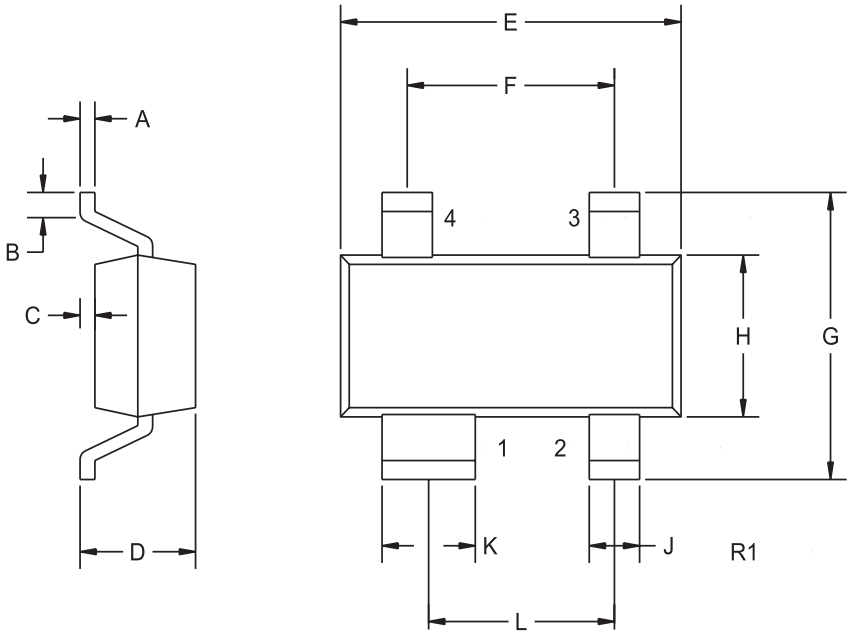
BAS56

DUAL HIGH CURRENT
SWITCHING DIODE

SOT-143 CASE - MECHANICAL OUTLINE



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

MARKING CODE: L51

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.004	0.005	0.10	0.13
B	0.006	-	0.15	-
C	0.003	0.005	0.08	0.13
D	0.037	0.043	0.94	1.09
E	0.110	0.118	2.79	3.00
F	0.079		2.01	
G	-	0.098	-	2.49
H	0.047	0.051	1.19	1.30
J	0.014	0.018	0.36	0.46
K	0.030	0.033	0.76	0.84
L	0.071		1.80	

SOT-143 (REV: R1)

R3 (13-November 2002)