



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Small Signal Product
200mW Surface Mount Schottky Barrier Diode
FEATURES

- Fast switching speed
- Low forward voltage drop
- Surface mount device type
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish with Nickel (Ni) underplate
- Pb free and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code


SOT-363

MECHANICAL DATA

- Case: SOT-363 small outline plastic package
- Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed: 260°C/10s
- Polarity: Indicated by cathode band
- Weight: 0.006 gram (approximately)
- Marking Code: KLA, KL6, KL7, KL8, KLB

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Forward Surge Current @ $t < 1.0$ s	I_{FSM}	600	mA
Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage temperature	T_j, T_{STG}	-55 to 125	$^\circ\text{C}$

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	30	--	V
Forward Voltage	V_F	$I_F=1\text{mA}$	--	0.32
		$I_F=10\text{mA}$	--	0.40
		$I_F=30\text{mA}$	--	0.50
		$I_F=100\text{mA}$	--	1.00
Reverse Current	I_R	--	2.0	μA
Total Capacitance	C_T	--	10	pF
Reverse Recovery Time	t_{rr}	--	5.0	nS

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RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Forward Characteristics

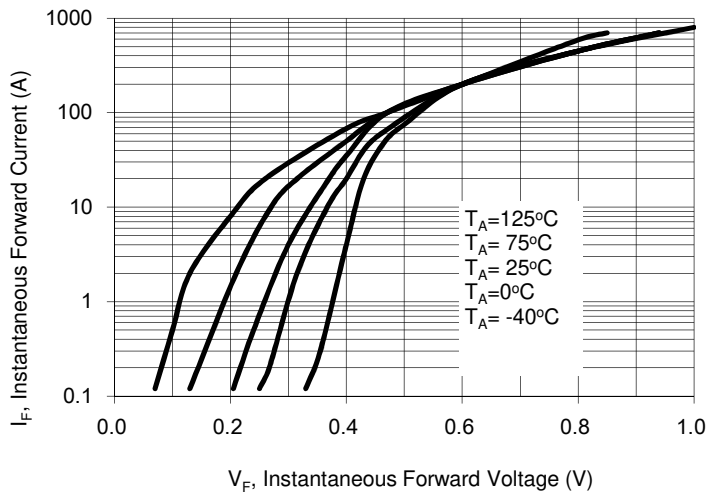


Fig. 2 Typical Reverse Characteristics

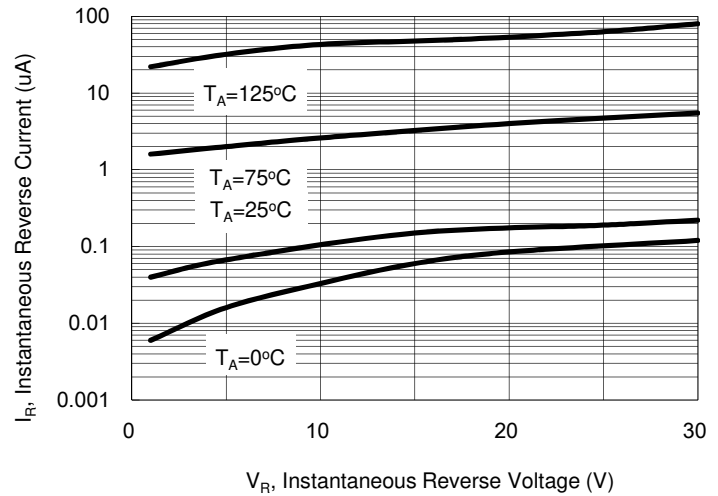


Fig. 3 Capacitance Between Terminals Characteristics

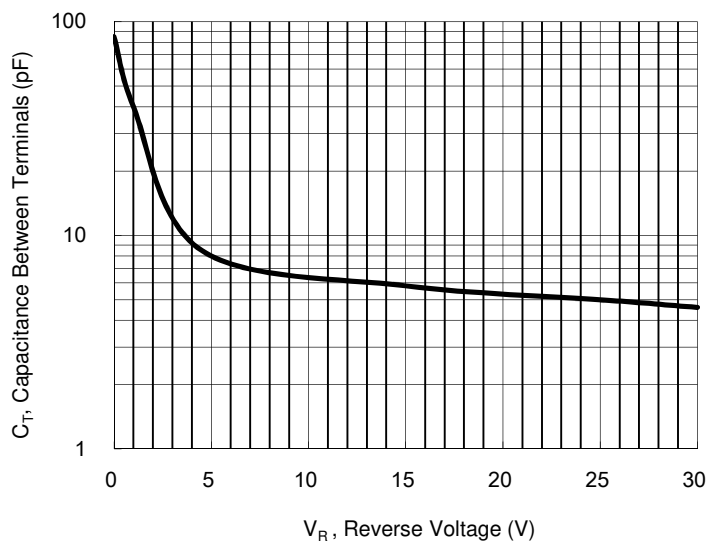
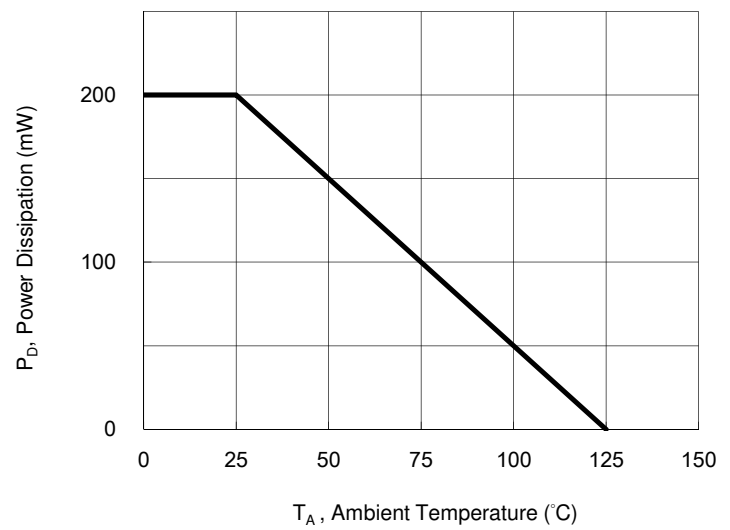


Fig. 4 Power Derating Curve



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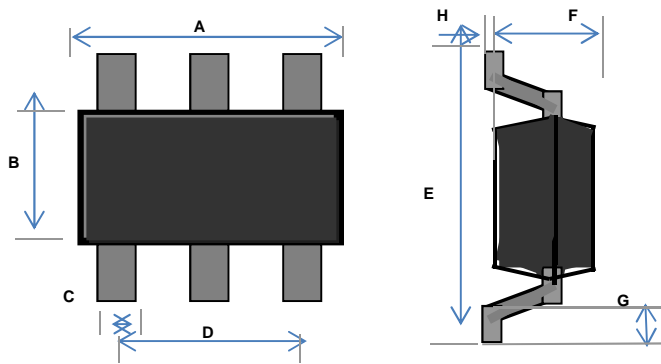
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
BAT54T	(Note)	RF	G	SOT-363	3K / 7" Reel	KLA
BAT54AD		RF	G	SOT-363	3K / 7" Reel	KL6
BAT54CD		RF	G	SOT-363	3K / 7" Reel	KL7
BAT54SD		RF	G	SOT-363	3K / 7" Reel	KL8
BAT54BR		RF	G	SOT-363	3K / 7" Reel	KLB

Note: Manufacture special control, if empty means no special control requirement.

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
BAT54T RF	BAT54T		RF	G	Green compound
BAT54T-D0 RF	BAT54T	D0	RF	G	Green compound

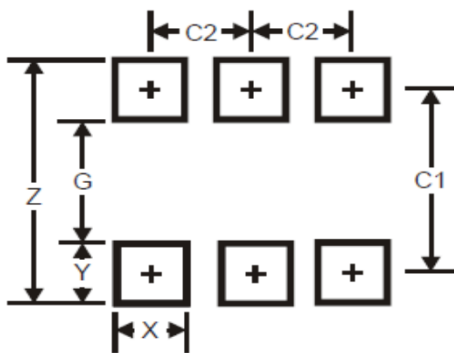
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DIMENSIONS



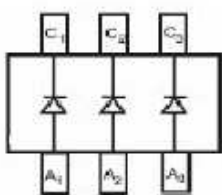
DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.000	2.200	0.079	0.087
B	1.150	1.350	0.045	0.053
C	0.150	0.350	0.006	0.014
D	1.200	1.400	0.047	0.055
E	2.150	2.450	0.085	0.096
F	0.850	1.050	0.033	0.041
G	0.250	0.460	0.010	0.018
H	0.000	0.100	0.000	0.004

SUGGESTED PAD LAYOUT

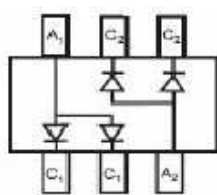


DIM	Unit (mm)	Unit (inch)
	Typ.	Typ.
Z	3.20	0.126
G	1.60	0.063
X	0.55	0.022
Y	0.80	0.031
C1	2.40	0.094
C2	0.95	0.037

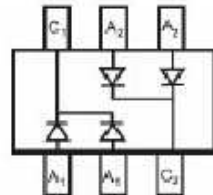
PIN CONFIGURATION



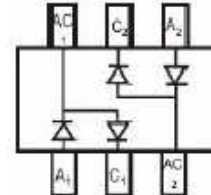
BAT54T



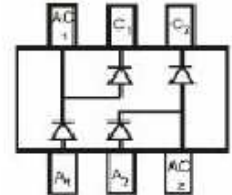
BAT54AD



BAT54CD



BAT54SD



BAT54BR

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