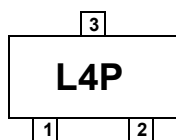
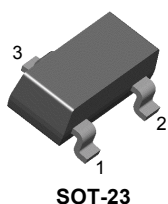
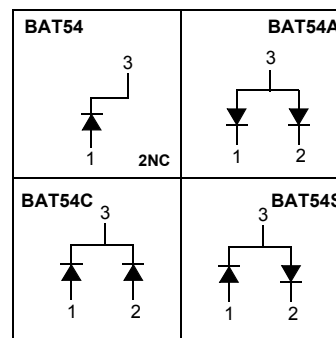


BAT54/A/C/S

Schottky Diodes



Connection Diagram



Absolute Maximum Ratings *

$T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second	600	mA
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	290	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	430	$^\circ\text{C/W}$

Electrical Characteristics

$T_C = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	$I_R = 10\mu\text{A}$	30		V
V_F	Forward Voltage	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$		240 320 400 500 0.8	mV mV mV mV V
I_R	Reverse Leakage	$V_R = 25\text{V}$		2	μA
C_T	Total Capacitance	$V_R = 1\text{V}, f = 1.0\text{MHz}$		10	pF
t_{rr}	Reverse Recovery Time	$I_F = I_R = 10\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$		5.0	ns

Typical Performance Characteristics

Figure 1. Forward Voltage vs Temperature

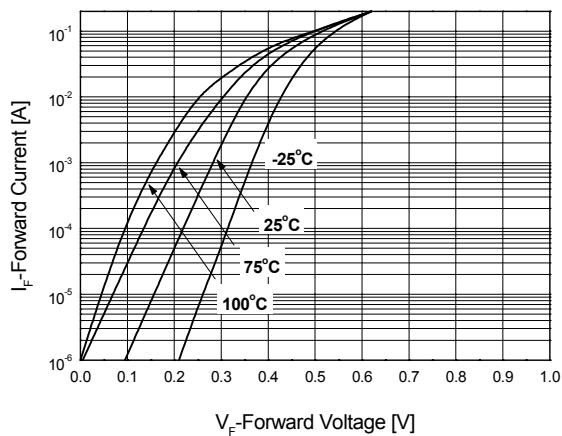


Figure 2. Reverse Leakage Current vs Temperature

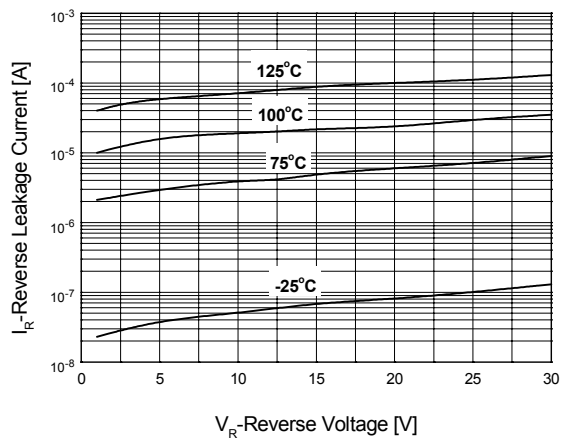
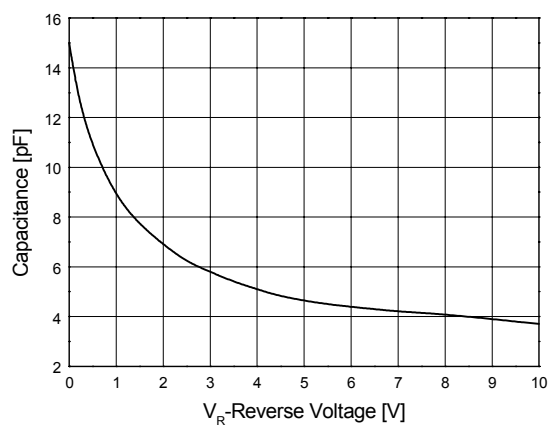


Figure 3. Capacitance vs Reverse Bias Voltage



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Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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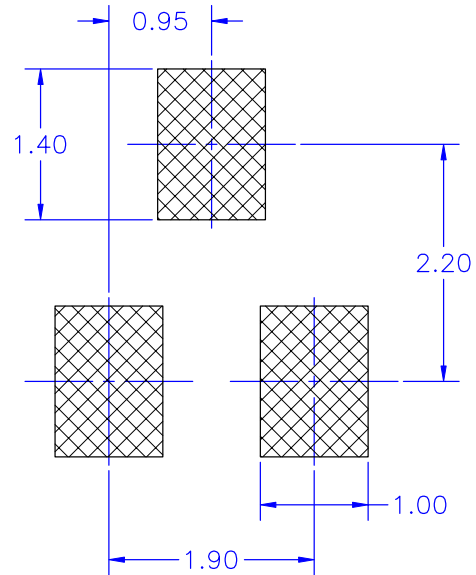
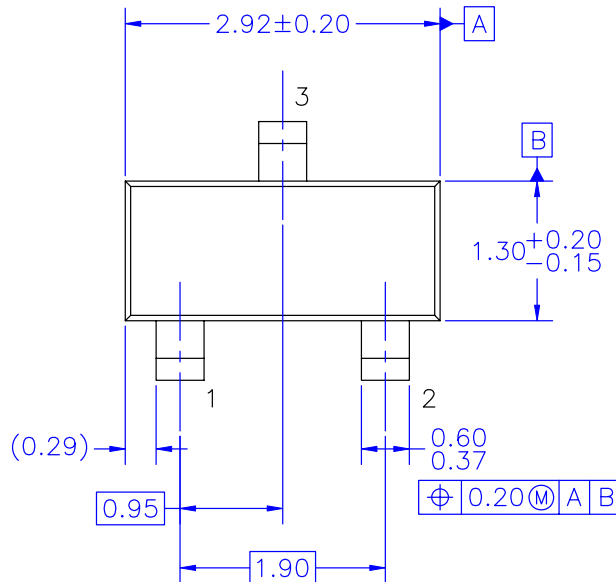
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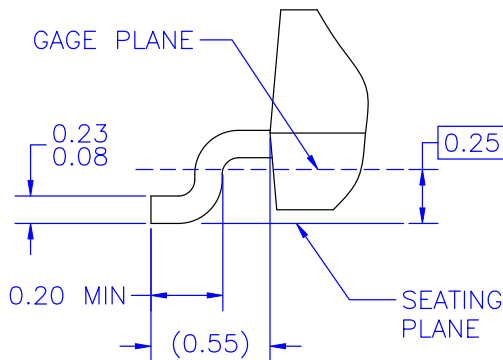
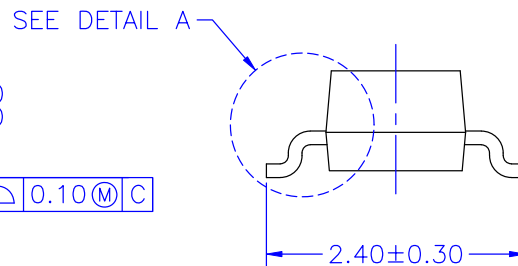
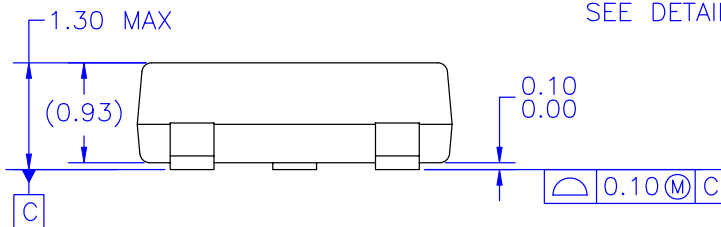
APPROVED
October 10, 2008

REVISIONS

LTR	DESCRIPTION	DATE	NAME/SITE
F	REVISE & REDRAW PER CURRENT STDA: ADD LAND PATTERN	NOV.30,1995	TL
G	ADD 0.004 (0.10) COPLANARITY; NOTE 1: 200 WAS 150; 5.08 WAS 3.81.	FEB.23,1998	MS
H	CHG DWG TEMPL FR NSC TO FSC; CHG DIM STD FR DUAL TO SINGLE; CHG PKG LEN DIM FR 2.92+/-0.13 TO 2.92+/-0.20; CHG PKG WID FR 1.30+/-0.10 TO 1.30+0.20/-0.15; CHG TOT PKG THIC FR 0.88-1.08 TO 1.30 MAX; CHG PROFILE FR 0.013-0.103 TO 0.00-0.10; CHG LD THIC FR 0.13+/-0.05 TO 0.08-0.23; CHG LD WID FR 0.445+/-0.054 TO 0.37-0.60; CHG LD PITCH FR 0.953+/-0.084 TO 0.95 BSC; CHG TOT LD PITCH FR 1.91+/-0.13 TO 1.90 BSC; CHG LAND PATTERN DIM FR 0.762 TYP TO 1.00, FR 0.762 TYP TO 1.40, FR 2.286 TYP TO 2.00; ADDED DIM (0.29); CHG NOTE A FR "STD LD FINISH SPEC" TO "JEDEC REF"; CHG NOTE B FR "JEDEC REF" TO "DIM REF"; ADDED NOTE C&D; ADD LD POS TOL	12AUG2003	MRG
9	CHG DRW NO FR MKT-M03B TO MKT-MA03D.	28 JULY 2008	MRG/CB



LAND PATTERN RECOMMENDATION



DETAIL A
SCALE: 2X

NOTES: UNLESS OTHERWISE SPECIFIED

- REFERENCE JEDEC REGISTRATION TO-236, VARIATION AB, ISSUE H.
- ALL DIMENSIONS ARE IN MILLIMETERS.
- DIMENSIONS ARE INCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR EXTRUSIONS.
- DIMENSIONING AND TOLERANCING PER ASME Y14.5M - 1994.
- DRAWING FILE NAME: MA03DREV9

APPROVALS	DATE	FAIRCHILD SEMICONDUCTOR™	
DRAWN: J.U. COMPARATIVO JR. 07AUG2008 CHECKED: L. GALERA APPROVED: M. GESTOLE G.S. BAJE			
PROJECTION 		SCALE 1:1	SIZE NA
		DRAWING NUMBER MKT-MA03D	REV 9
		FORMERLY: N/A SHEET : 1 OF 1	