B220LW-S THRU B240LW-S

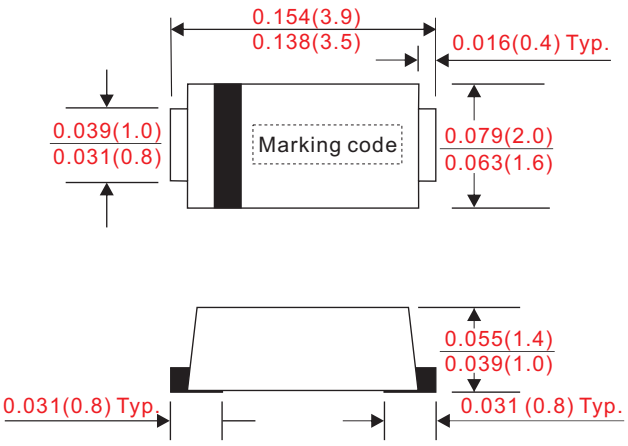
2A Surface Mount Schottky Barrier Rectifiers

■ Features

- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Suffix "G" indicates Halogen-free part, ex.B220LWG-S.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Outline

SOD-123S



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-123S
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.018 gram

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current		I_O			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25°C$	I_R			1.0	mA
	$V_R = V_{RRM}$ $T_A = 100°C$				20	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		160		pF
Thermal resistance	Junction to ambient	$R_{\theta JA}$		70		°C/W
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @2A, $T_A = 25°C$ V_F (V)	Operating temperature T_J (°C)
B220LW-S	L22	20	14	20	0.38	-55 ~ +100
B240LW-S	L24	40	28	40	0.40	

Document ID : DS-12K4D
Issued Date : 2010/05/05
Revised Date : 2012/05/31
Revision : C

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

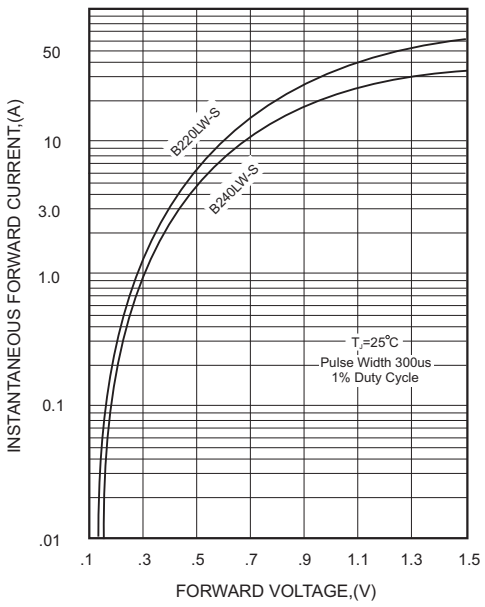


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

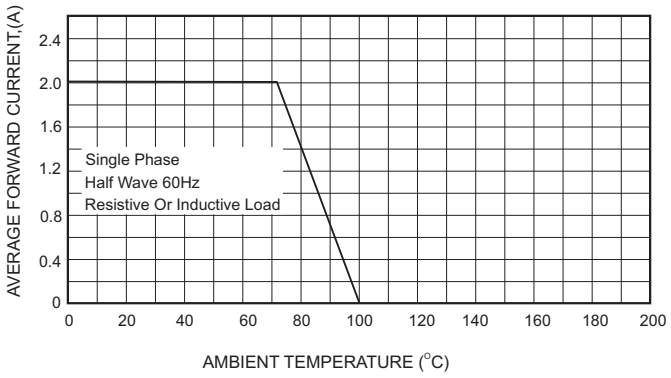


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

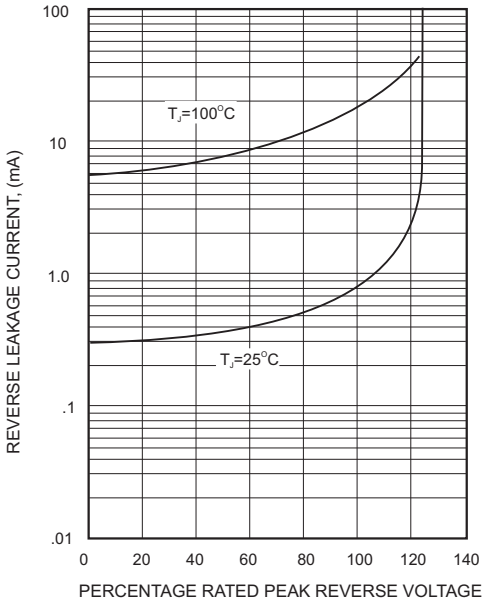


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

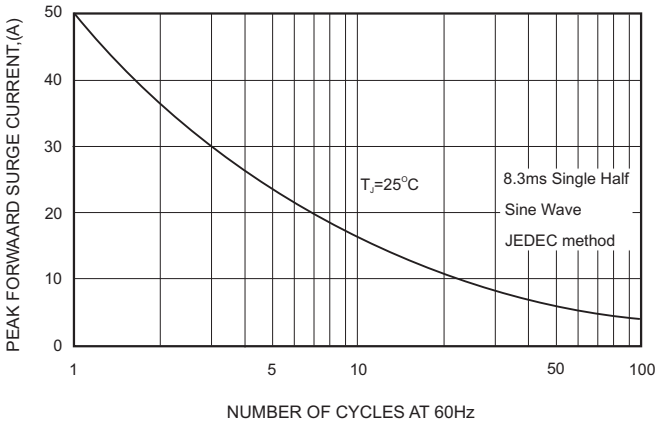
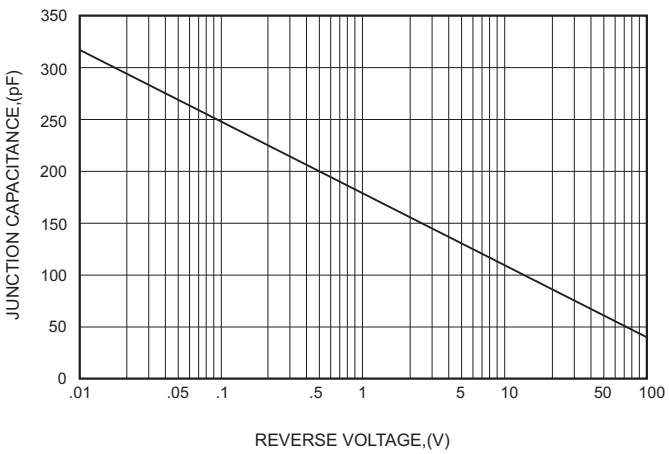
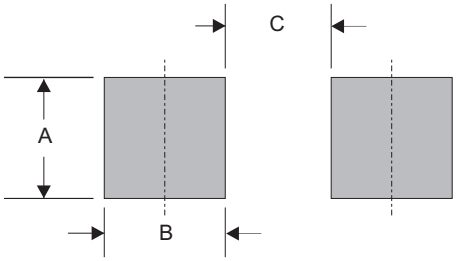


FIG.5-TYPICAL JUNCTION CAPACITANCE



Document ID : DS-12K4D
Issued Date : 2010/05/05
Revised Date : 2012/05/31
Revision : C

■ SOD-123S foot print



A	B	C
0.044 (1.10)	0.039 (1.00)	0.079 (2.00)

Dimensions in inches and (millimeters)

■ CITC reserves the right to make changes to this document and its products and specifications at any time without notice.

■ Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

■ CITC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does CITC assume any liability for application assistance or customer product design.

■ CITC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

■ No license is granted by implication or otherwise under any intellectual property rights of CITC.

■ CITC products are not authorized for use as critical components in life support devices or systems without express written approval of CITC.

http://www.citcorp.com.tw/ Tel:886-3-5600628 Fax:886-3-5600636

Add:Rm. 3, 2F., No.32, Taiyuan St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)

Document ID : DS-12K4D
Issued Date : 2010/05/05
Revised Date : 2012/05/31
Revision : C