

■ Features

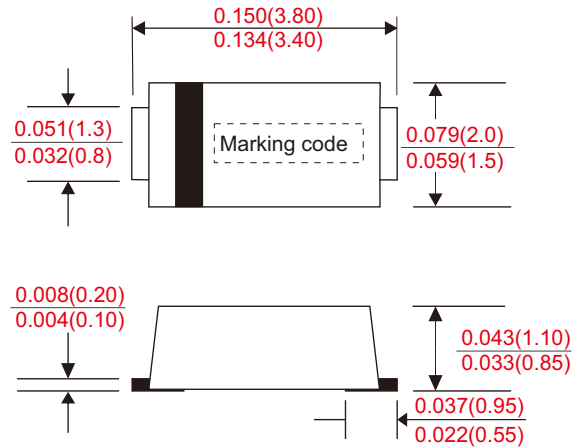
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead free in compliance with EU RoHS.

■ Mechanical data

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

■ Outline

SOD-123SL



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward Rectified Output Current		$I_o$			1.0	A
Forward Surge Current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$			25	A
Peak Reverse Current @ 25°C	40V,60V	$I_R$			0.1	mA
	100V,150V,200V				0.05	
At Rated DC Blocking Voltage @ 100°C	40V,60V	$I_R$			10	
	100V,150V,200V				5	
Storage temperature Range		$T_{STG}$	-50		+150	°C

Symbol	Max. repetitive peak reverse voltage $V_{RRM}$ (V)	Max. RMS voltage $V_{RMS}$ (V)	Max. DC blocking voltage $V_R$ (V)	Max. forward voltage @1A, $T_A = 25^\circ\text{C}$ $V_F$ (V)	Operating temperature $T_J$ (°C)
B140WG-SL	40	28	40	0.55	-50 ~ +150
B160WG-SL	60	42	60	0.70	
B1100WG-SL	100	70	100	0.85	
B1150WG-SL	150	105	150	0.92	
B1200WG-SL	200	140	200		

Rating and characteristic curves

FIG. 1- FORWARD CURRENT DERATING CURVE

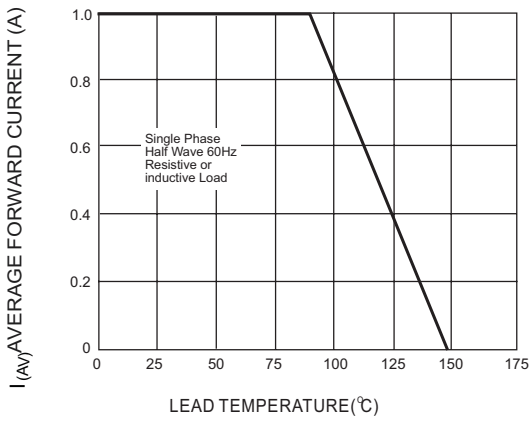


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

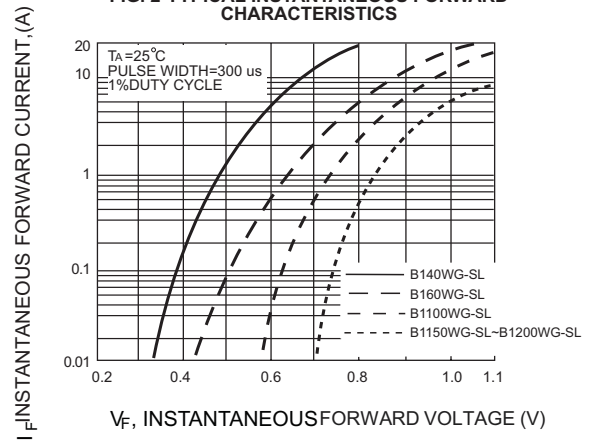


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

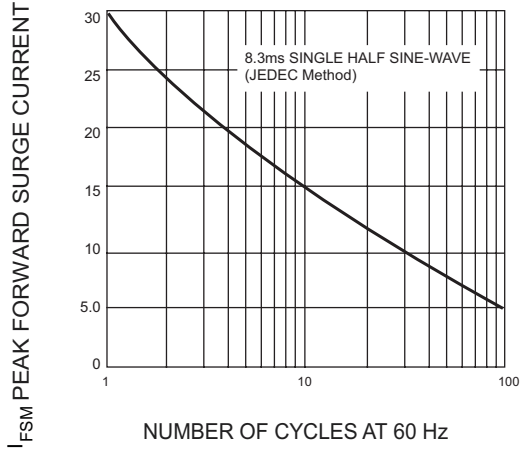
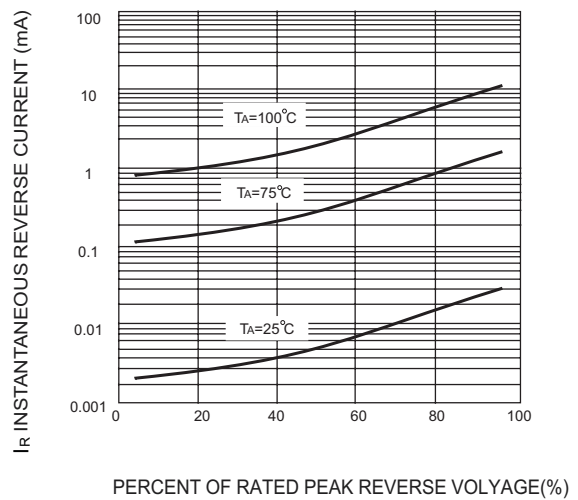


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



■ Marking Information



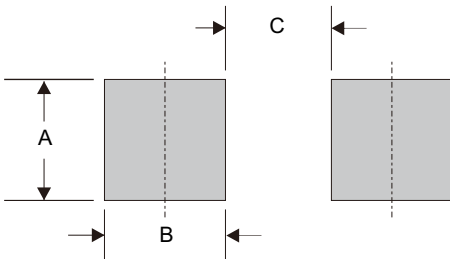
	Part number	Marking Code
Halogen free	B140WG-SL	D14
	B160WG-SL	D16
	B1100WG-SL	D110
	B1150WG-SL	D115
	B1200WG-SL	D120

■ Ordering/Packing information

	Part number	Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen free	B140WG-SL	SOD-123SL	3,000	15,000	180,000

Notes : 1. For packaging details please reference our website at <http://www.citcorp.com.tw/tchinese/products/index.php>

■ SOD-123SL foot print



A	B	C
0.048 (1.22)	0.045 (1.15)	0.076 (1.95)

Dimensions in inches and (millimeters)

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