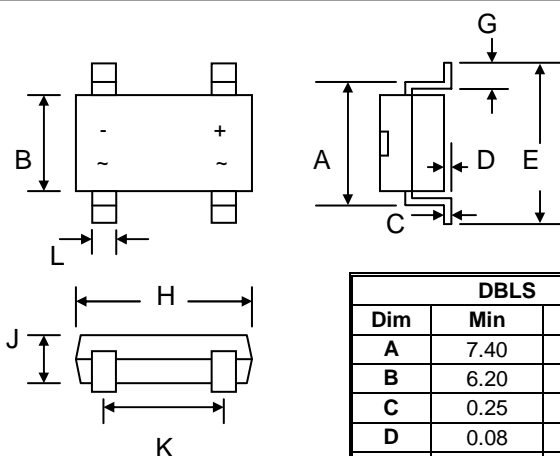


Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-0



Mechanical Data

- Case: **DBLS** , Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

DBLS		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.25	—
D	0.08	0.33
E	9.30	10.30
G	1.02	1.53
H	8.00	8.51
J	2.15	3.40
K	5.00	5.20
L	0.90	1.20
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	HDBL 251G	HDBL 252G	HDBL 253G	HDBL 254G	HDBL 255G	HDBL 256G	HDBL 257G	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V	
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	800	V	
Average Rectified Output Current @T _L = 100°C	I _O	2.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60							A	
Forward Voltage @I _F = 2.0A	V _{FM}	1.0		1.3		1.7			V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	10 500							μA	
Reverse Recovery Time (Note 1)	t _{rr}	50				75				nS
Typical Junction Capacitance (Note 2)	C _j	15							pF	
Typical Thermal Resistance (Note 3)	R _{θJL}	15							°C/W	
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C	

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

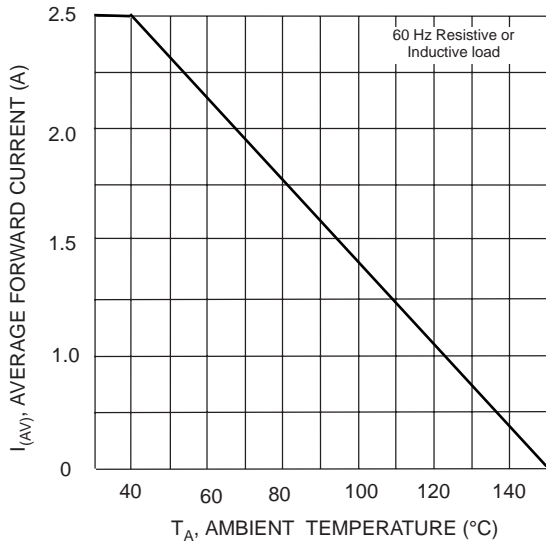


Fig. 1 Output Current Derating Curve

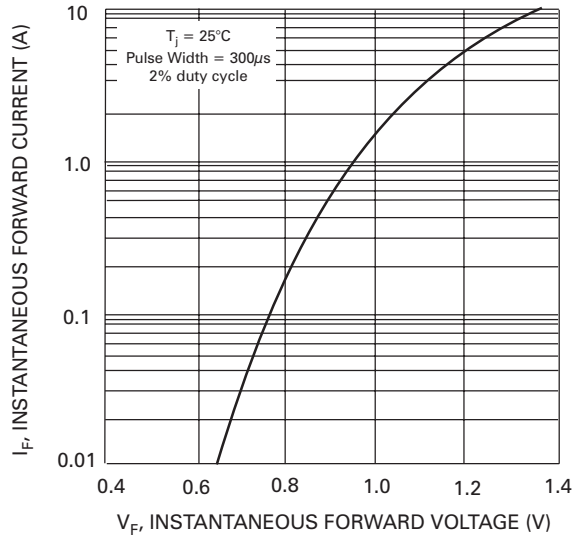


Fig. 2 Typ Forward Characteristics (per element)

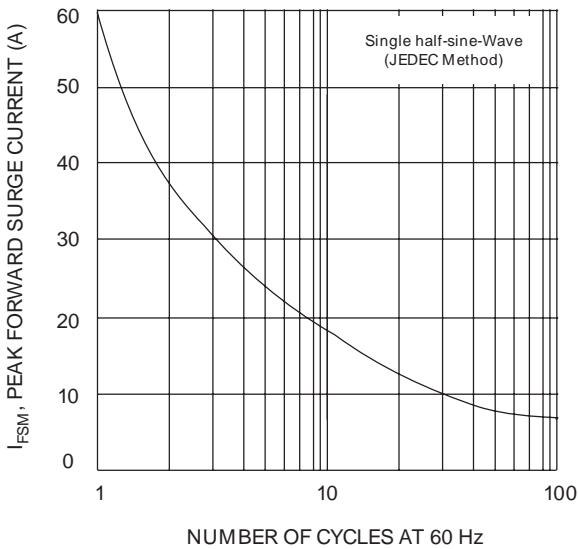


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

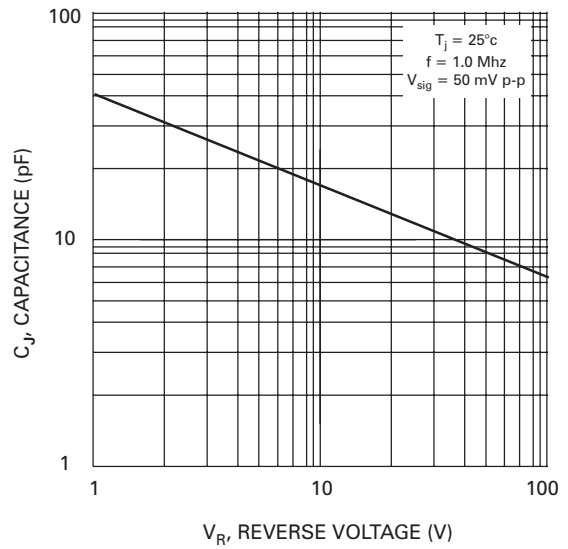


Fig. 4 Typ Junction Capacitance (per element)

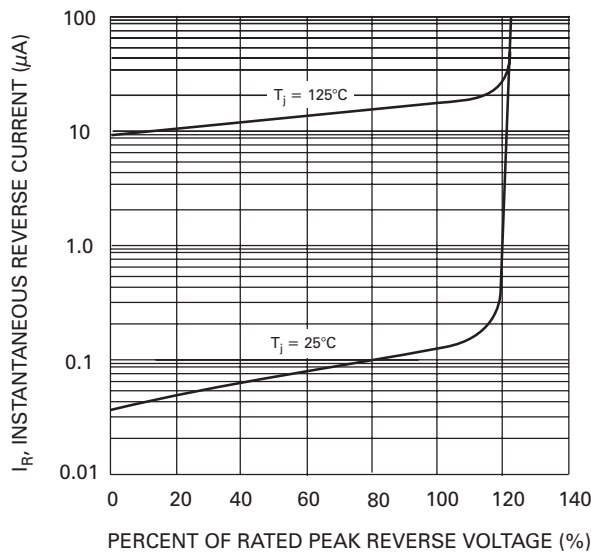


Fig. 5 Typ Reverse Characteristics (per element)

Fig. 5 Recovery