

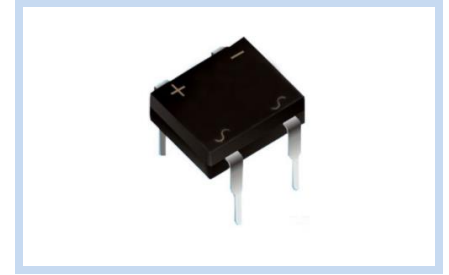
Single-Phase Bridge Rectifier 1.5A DIP Package

DB15 Series

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FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 1.5A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 50A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS



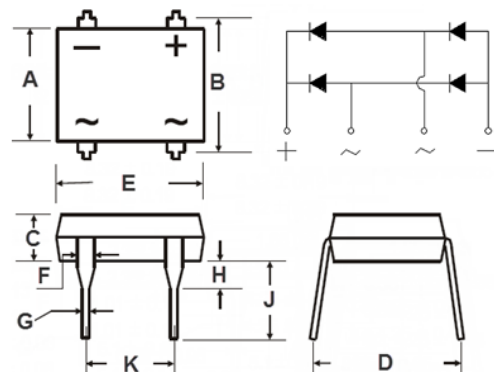
Parameter	Code	DB 151	DB 152	DB 153	DB 154	DB 155	DB 156	DB 157	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	$I_{F(AV)}$	1.5, $T_A=40^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.1, $I_F=1.5\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I_R	10, $T_A=25^\circ\text{C}$							μA
	I_R	500, $T_A=125^\circ\text{C}$							μA
Typical Junction Capacitance per Element	C_j	25.0							pF
Operating Junction and Storage Temperature	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	110							$^\circ\text{C/W}$

Note:

1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
2. Thermal resistance from Junction to Ambient on P.C. board mounting.
3. Measured at 2.0MHz and applied reverse voltage of 4.0 VDC.

DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	6.20	6.50	F	0.88	1.14
B	7.24	8.00	G	0.46	0.58
C	2.20	2.50	H	1.27	2.03
D	7.60	8.90	J	3.81	4.69
E	8.13	8.51	K	5.00	5.20



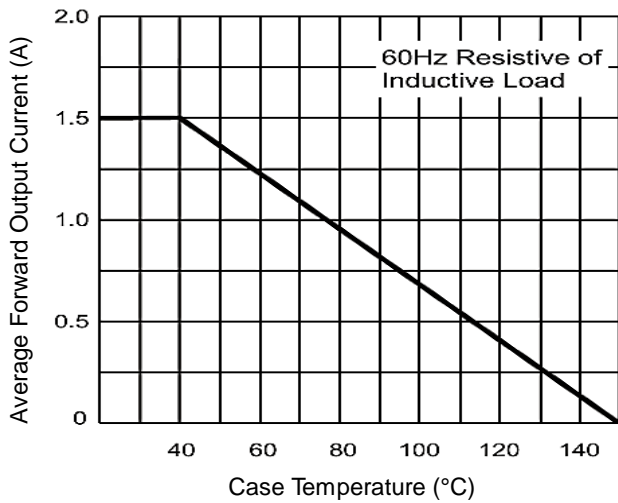
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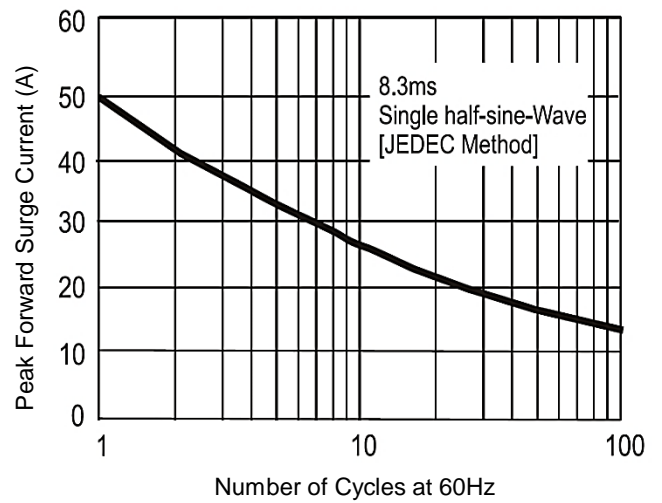
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RATING AND CHARACTERISTIC CURVES

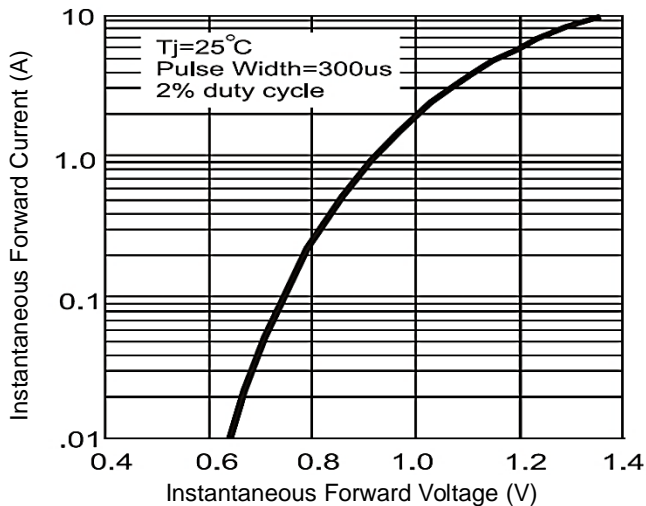
Derating Curve for Output Rectified Current



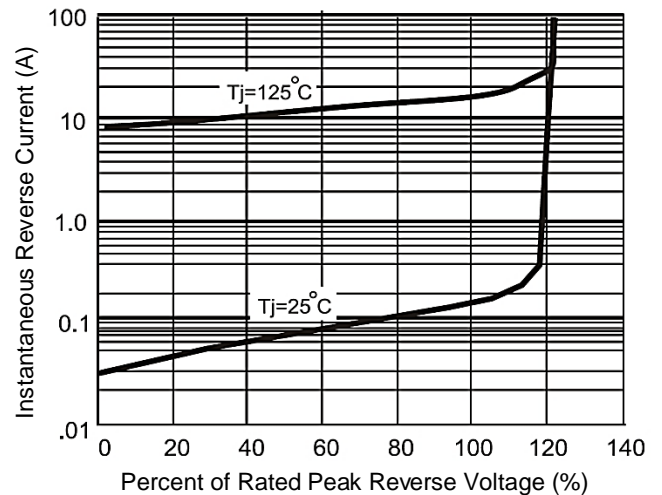
Maximum Non-Repetitive Peak Forward Surge Current



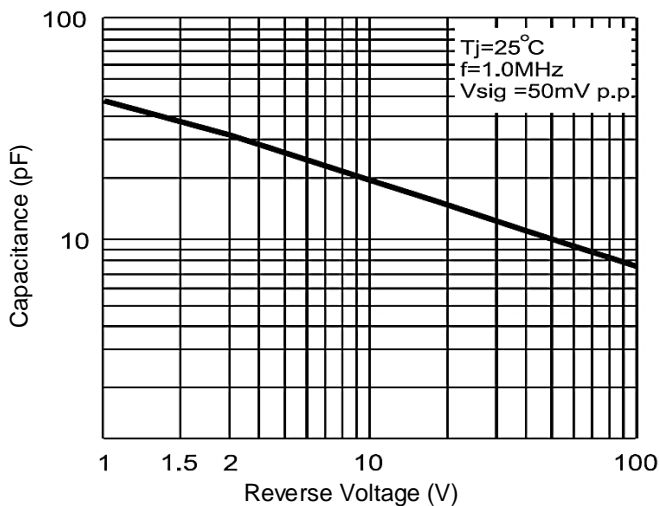
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



*Specifications subject to change without notice.