Elektronische Bauelemente

DB101 ~ DB107

VOLTAGE 50 V ~ 1000 V

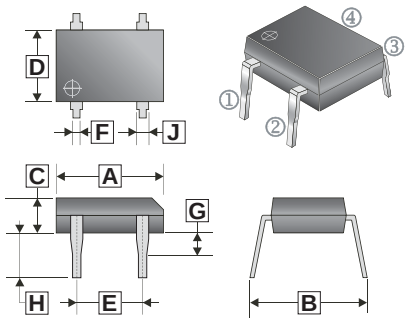
1.0 Amp Surface Mount Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low forward voltage drop, high current capability
- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive products
- Lead tin Pb / Sn copper
- The plastic material has UL flammability classification 94V-0

DB-1



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	8.00	9.30	F	0.55 REF.	
B	7.60	8.90	G	1.50 REF.	
C	2.90	3.40	H	3.80	4.70
D	6.20	6.50	J	-	-
E	5.00	5.20			

MECHANICAL DATA

- Polarity: As marked on Body
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

PARAMETERS		SYMBOL	DB 101	DB 102	DB 103	DB 104	DB 105	DB 106	DB 107	UNIT
Peak Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage		V_{RMS}	35	70	140	280	420	560	700	
DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current @T_A=40℃		$I_{(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)		I_{FSM}	50							A
Maximum Forward Voltage at 1A DC		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J=25℃	I_R	10							uA
	T_J=125℃		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	10							A^2s
Typical Junction Capacitance Per Element (Note1)		C_J	25							pF
Typical Thermal Resistance (Note2)		$R_{\theta JA}$	40							℃/W
Operating and Storage temperature range		T_J, T_{STG}	-55 ~ 150							℃

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC
2. Device mounted P.C.B with 0.47x0.47"(12mmx12mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES

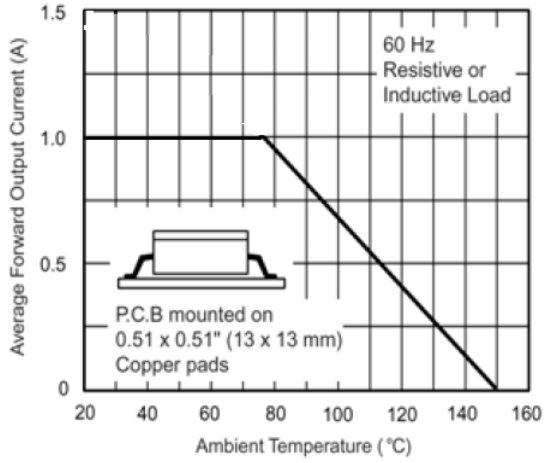


Figure 1. Derating Curve Output Rectified Current

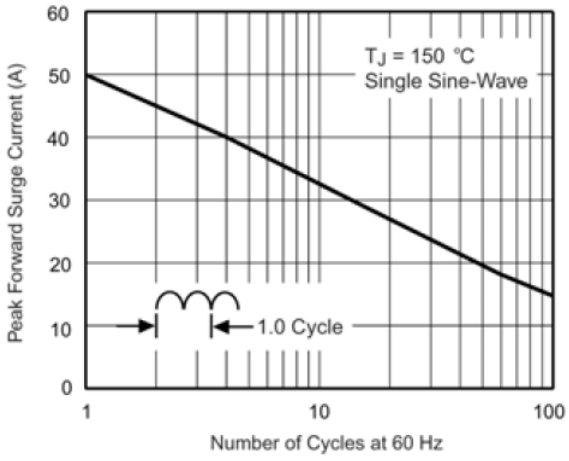


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

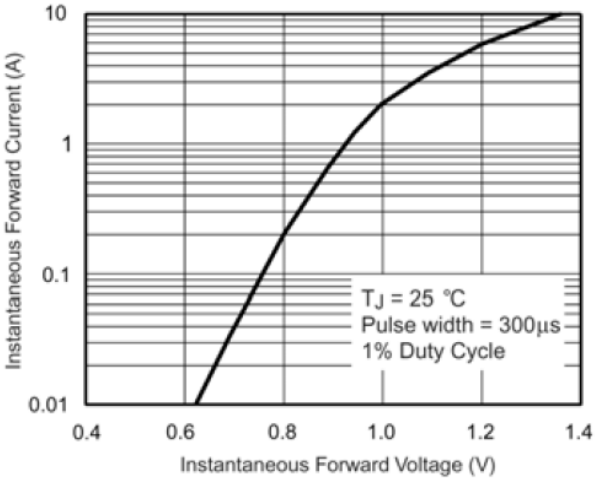


Figure 3. Typical Forward Characteristics Per Leg

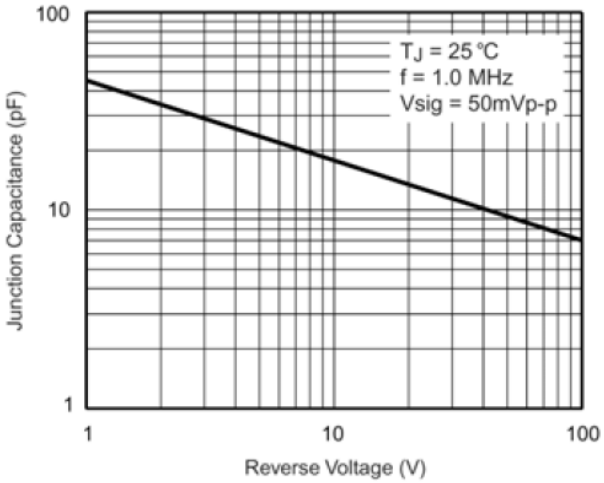


Figure 5. Typical Junction Capacitance Per Leg

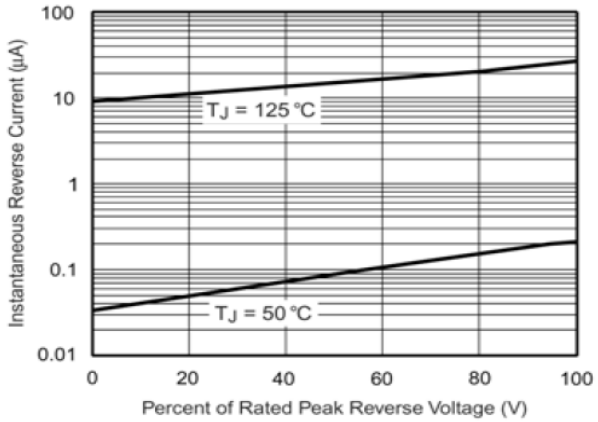


Figure 4. Typical Reverse Leakage Characteristics Per Leg

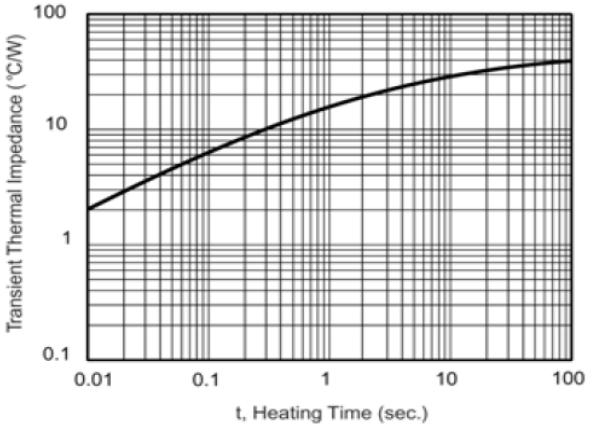


Figure 6. Typical Transient Thermal Impedance