

# D4SB80

**PRV : 800 Volts**  
**Io : 4.0 Amperes**

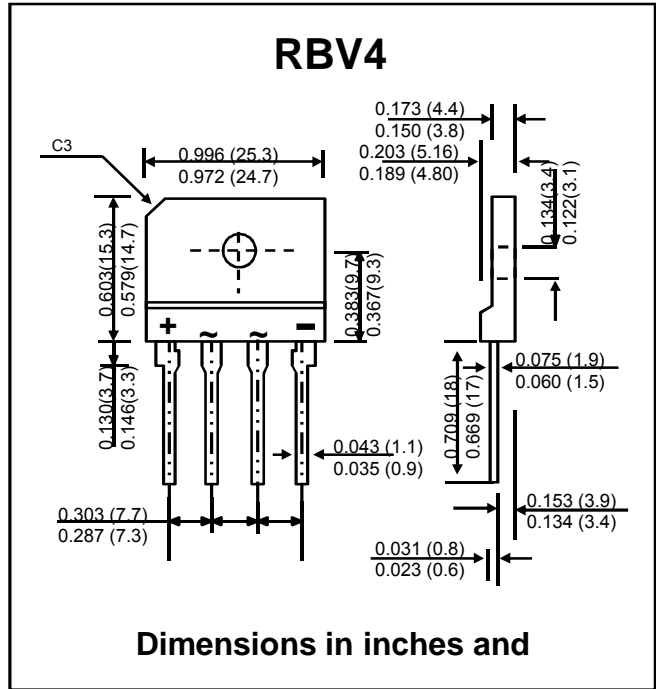
**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

**MECHANICAL DATA :**

- \* Case : Reliable low cost construction utilizing molded plastic technique
- \* Epoxy : UL94V-O rate flame retardant
- \* Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Polarity symbols marked on case
- \* Mounting position : Any
- \* Weight : 4.28 grams

## SILICON BRIDGE RECTIFIER



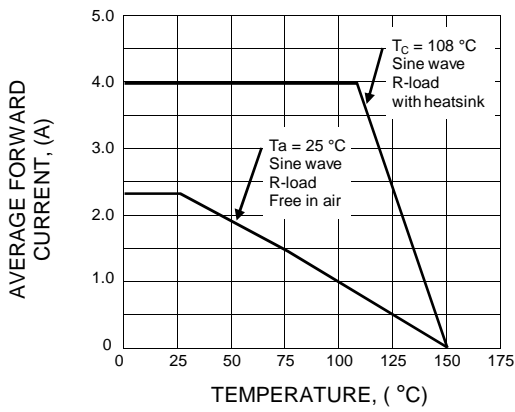
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** (If not specified Tc = 25 °C)

RATING		SYMBOL	VALUE	UNIT
Maximum Reverse Voltage		$V_{RM}$	800	V
Maximum Average Rectified Forward Current (50 Hz sine wave, R-load)	With heatsink Tc = 108 °C	$I_{F(AV)}$	4.0	A
	Without heatsink Ta = 25 °C		2.3	
Maximum Peak Surge Forward Current, 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj = 25 °C		$I_{FSM}$	150	A
Maximum Forward Voltage at $I_F = 2.0 A$ **		$V_F$	0.95	V
Maximum Reverse Current at $V_R = V_{RM}$ **		$I_R$	10	µA
Thermal Resistance, Junction to Case (With heatsink)		$R_{\theta JC}$	5.5	°C/W
Thermal Resistance, Junction to Lead (Without heatsink)		$R_{\theta JL}$	6.0	°C/W
Thermal Resistance, Junction to Ambient (Without heatsink)		$R_{\theta JA}$	30	°C/W
Operating Junction Temperature Range		$T_J$	150	°C
Storage Temperature Range		$T_{STG}$	- 40 to + 150	°C

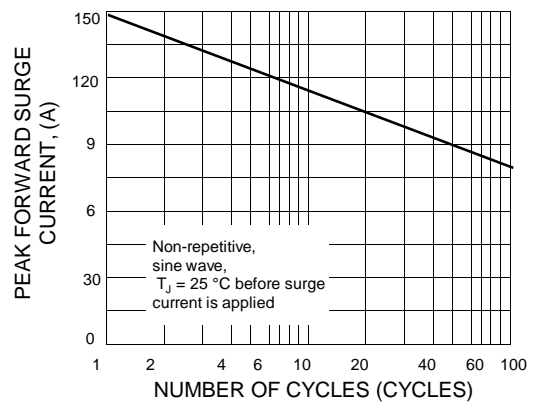
\*\* Pulse measurement, Rating of per diode.

**RATING AND CHARACTERISTIC CURVES ( D4SB80 )**

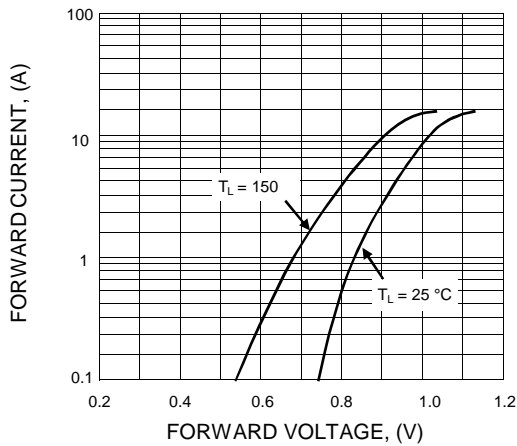
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - FORWARD POWER DISSIPATION**

