

D5SBA10 ~ D5SBA60

SILICON BRIDGE RECTIFIERS

PRV : 100 ~ 600 Volts

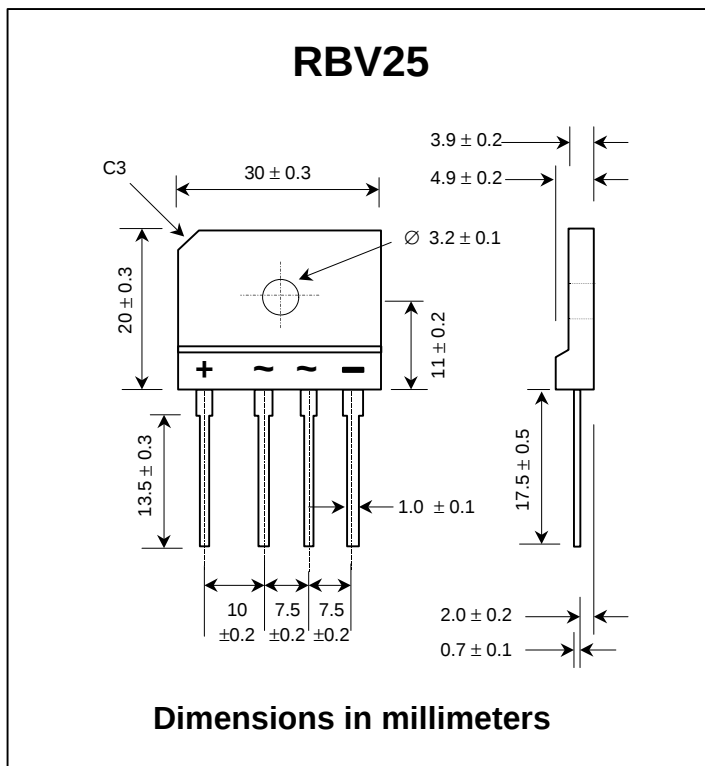
Io : 6 Amperes

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * Very good heat dissipation
- * **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 : 7.7 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	D5SBA10	D5SBA20	D5SBA40	D5SBA60	UNIT
Maximum Reverse Voltage	V _{RM}	100	200	400	600	V
Maximum Average Forward Current (50Hz Sine wave, R-load)	I _{F(AV)}	6 (With heatsink, T _c = 110°C) 2.8 (Without heatsink, T _a = 25°C)				A
Maximum Peak Forward Surge Current, T _j = 25°C (50Hz sine wave, Non-repetitive 1 cycle peak value)	I _{FSM}	120				A
Current Squared Time at 1ms ≤ t < 10 ms, T _c = 25°C	I ² t	60				A ² S
Maximum Forward Voltage per Diode at I _F = 3.0 A	V _F	1.05				V
Maximum DC Reverse Current, V _R = V _{RM} (Pulse measurement, Rating of per diode)	I _R	10				μA
Maximum Thermal Resistance, Junction to case	R _{θJC}	3.4 (With heatsink)				°C/W
Maximum Thermal Resistance, Junction to Ambient	R _{θJA}	26 (Without heatsink)				°C/W
Operating Junction Temperature	T _J	150				°C
Storage Temperature Range	T _{STG}	- 40 to + 150				°C

RATING AND CHARACTERISTIC CURVES (D5SB10 ~ D5SB60)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

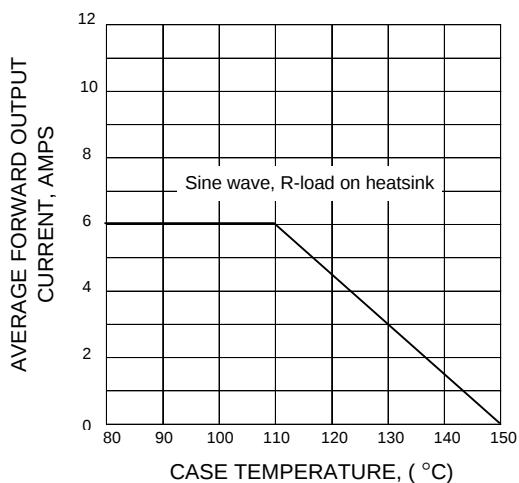


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

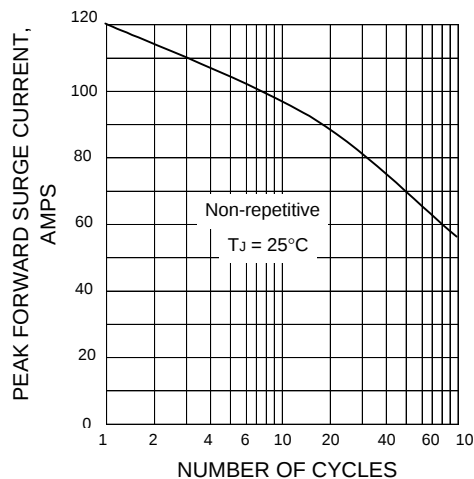


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

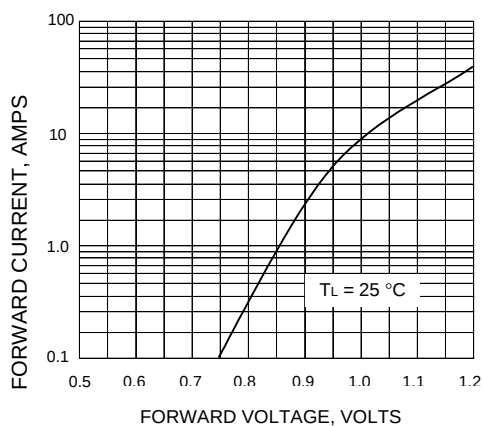


FIG.4 - POWER DISSIPATION

