Certificate Number: Q10561

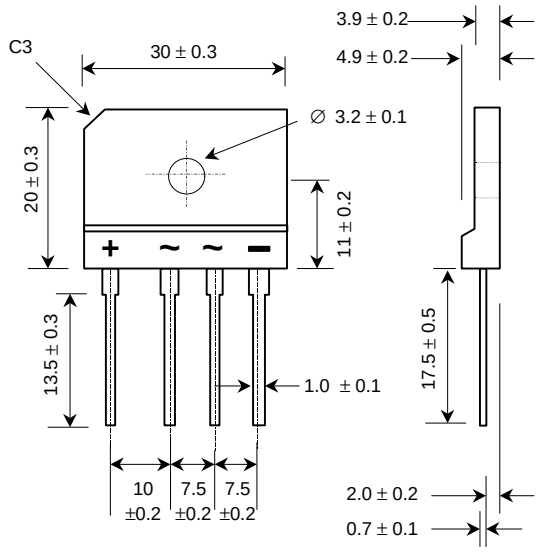
Certificate Number: E17276

D5SBA10 ~ D5SBA60

SILICON BRIDGE RECTIFIERS

PRV : 100 ~ 600 Volts
Io : 6 Amperes

RBV25



Dimensions in millimeters

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, Tc = 110°C) 2.8 (Without heatsink, Ta = 25°C)				A
Maximum Peak Forward Surge Current, Tj = 25°C (50Hz sine wave, Non-repetitive 1 cycle peak value)	I_{FSM}	120				A
Current Squared Time at 1ms ≤ t < 10 ms, Tc=25°C	I^2t	60				A^2S
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	RθJC	3.4 (With heatsink)				°C/W
Maximum Thermal Resistance, Junction to Ambient	RθJA	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

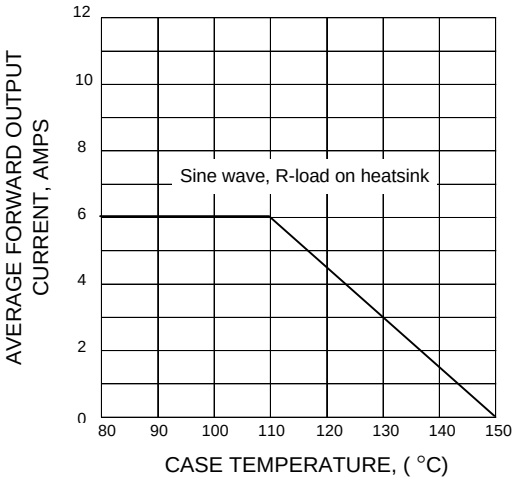


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

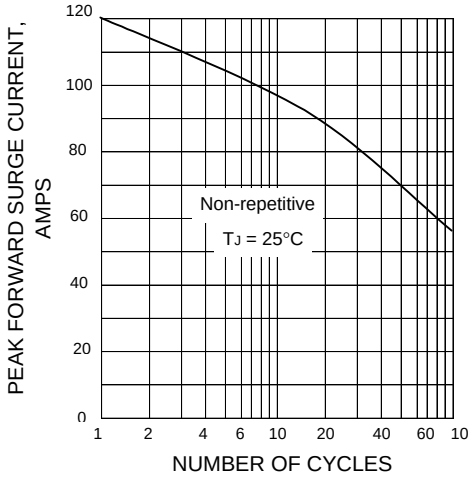


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

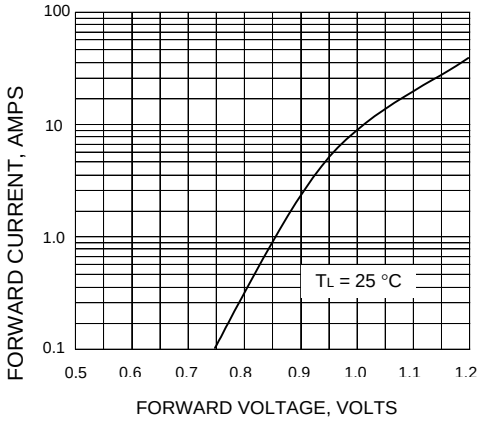


FIG.4 - POWER DISSIPATION

