Certificate Number: Q10561 Certificate Number: E17276

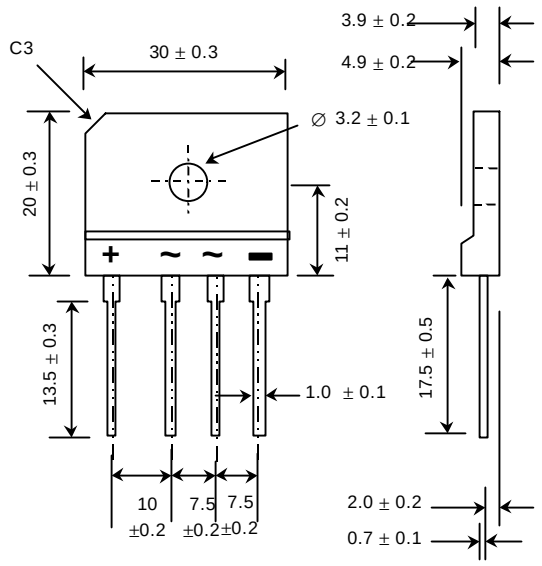
RBV600 - RBV610 SILICON BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts
Io : 6.0 Amperes

FEATURES :
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* High case dielectric strength of 2000 V_{DC}
* Ideal for printed circuit board
* Very good heat dissipation

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

RBV25



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	RBV 600	RBV 601	RBV 602	RBV 604	RBV 606	RBV 608	RBV 610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current Tc = 55°C	$I_{F(AV)}$	6.0							Amps.
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200							Amps.
Current Squared Time at t < 8.3 ms.	I^2t	64							A^2S
Maximum Forward Voltage per Diode at I_F = 3.0 Amps.	V_F	1.0							Volts
Maximum DC Reverse Current Ta = 25 °C	I_R	10							μA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	200							μA
Typical Thermal Resistance (Note 1)	RθJC	8.0							°C/W
Operating Junction Temperature Range	T_J	- 40 to + 150							°C
Storage Temperature Range	T_{STG}	- 40 to + 150							°C

Notes : 1. Thermal Resistance from junction to case with units mounted on a 2.6"x1.4"x0.06" THK (6.5cm.x3.5cm.x0.15cm.) Al. Plate. Heatsink

UPDATE : MARCH 6, 2000

RATING AND CHARACTERISTIC CURVES (RBV600 - RBV610)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

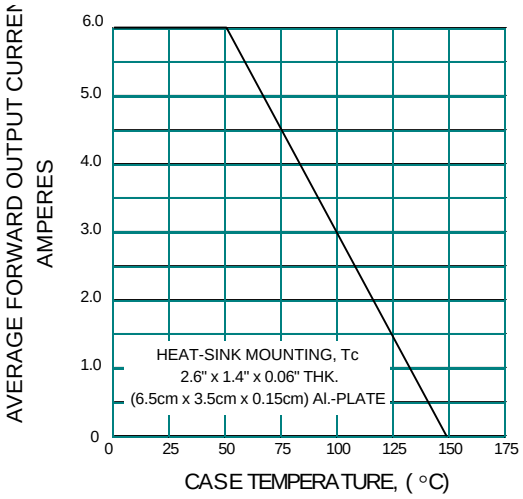


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

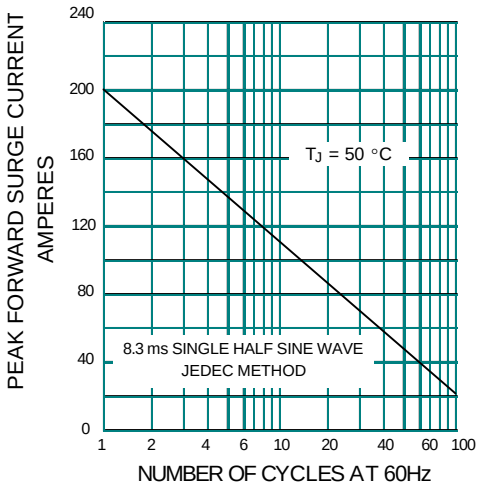


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

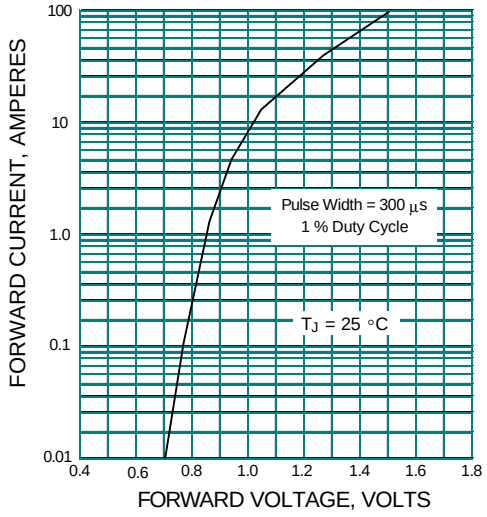


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE