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RBV401 - RBV406

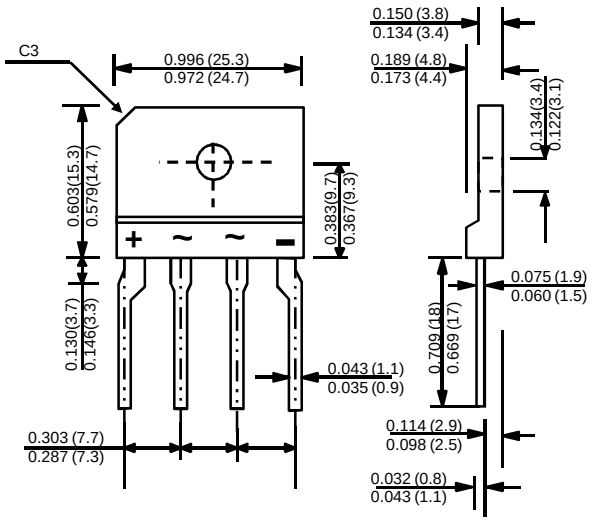
SILICON BRIDGE RECTIFIERS

PRV : 100 - 600 Volts
Io : 4.0 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-0 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

RBV4



Dimensions in inches and (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	RBV401	RBV402	RBV404	RBV406	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum Reverse Voltage	V_R	100	200	400	600	V
Maximum Average Forward Rectified Current Tc=50°C	$I_{F(AV)}$	4.0				A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sinwave, Single Shot)	I_{FSM}	80				A
Maximum Forward Voltage per Diode at I_F = 2.0 A	V_F	1.05		1.1		V
Maximum Reverse Current at Reverse Voltage	I_R	10				µA
Maximum Reverse Current at Reverse Voltage Ta = 100 °C	$I_{R(H)}$	100				µA
Thermal Resistance, Junction to Case	RθJC	5.0				°C/W
Operating Junction Temperature Range	T_J	- 40 to + 150				°C
Storage Temperature Range	T_{STG}	- 40 to + 150				°C

RATING AND CHARACTERISTIC CURVES (RBV401 THRU RBV406)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

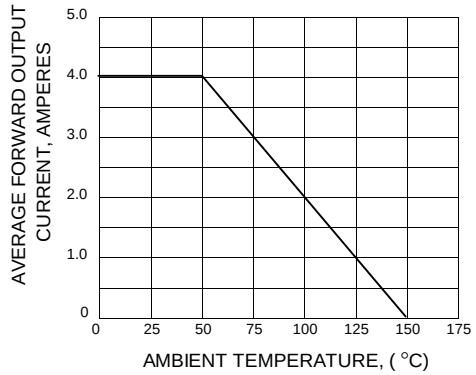


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

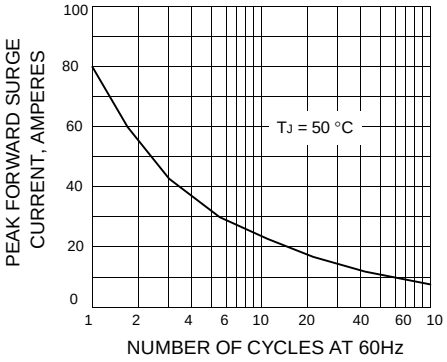


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

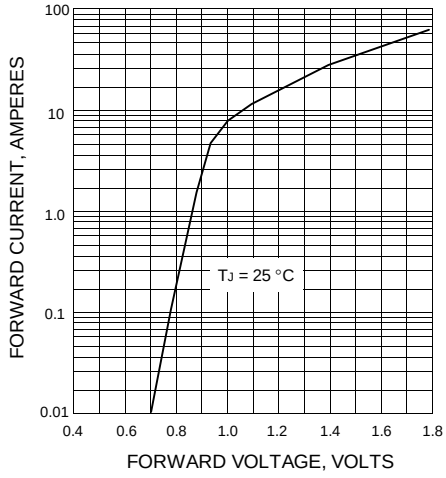


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

