Certificate Number: Q10561

Certificate Number: E17276

SB320S - SB3B0S

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 20 - 100 Volts
Io : 3.0 Amperes

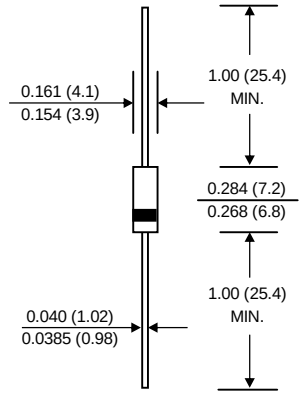
FEATURES :

* High current capability
* High surge current capability
* High reliability
* High efficiency
* Low power loss
* Low forward voltage drop
* Pb / RoHS Free

MECHANICAL DATA :

* Case : D2A Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.645 gram

D2A



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	SB 320S	SB 330S	SB 340S	SB 350S	SB 360S	SB 370S	SB 380S	SB 390S	SB 3B0S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	70	80	90	100	V
Maximum Average Forward Current 0.375", 9.5mm Lead Length See Fig.1	$I_{F(AV)}$	3.0									A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	80									A
Typical thermal resistance (Note 2)	$R\theta_{JA}$	40									°C/W
	$R\theta_{JL}$	12									
Maximum Forward Voltage at I_F = 3.0 A	V_F	0.5			0.74			0.79			V
Maximum Reverse Current at Ta = 25 °C	I_R	0.5									mA
Rated DC Blocking Voltage (Note 1) Ta = 100 °C	$I_{R(H)}$	20									mA
Junction Temperature Range	T_J	- 65 to + 125			- 65 to + 150						°C
Storage Temperature Range	T_{STG}	- 65 to + 150									°C

Note : (1) Pulse Test : Pulse Width = 300 ms, Duty Cycle = 2%
(2) Thermal resistance from junction to lead vertical P.C.B. mounting, 0.500"(12.7 mm) lead length with 2.5 x 2.5"(63.5x63.5mm) copper pad

RATING AND CHARACTERISTIC CURVES (SB320S - SB3B0S)

FIG.1 - FORWARD CURRENT DERATING CURVE

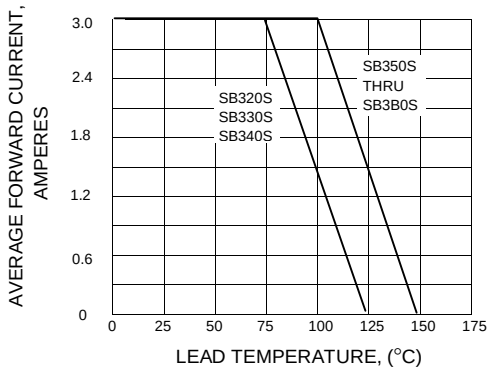


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

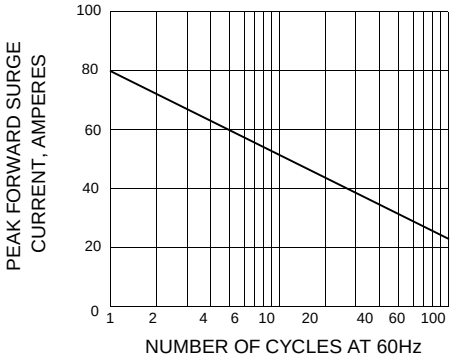


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

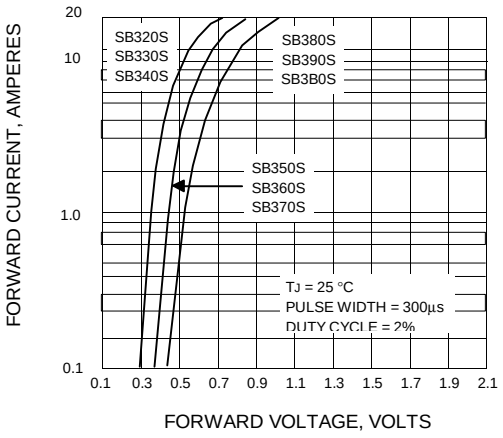


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

