



Certificate Number: Q10561

Certificate Number: E17276

SB520S - SB5B0S

PRV : 20 - 100 Volts
Io : 5.0 Amperes

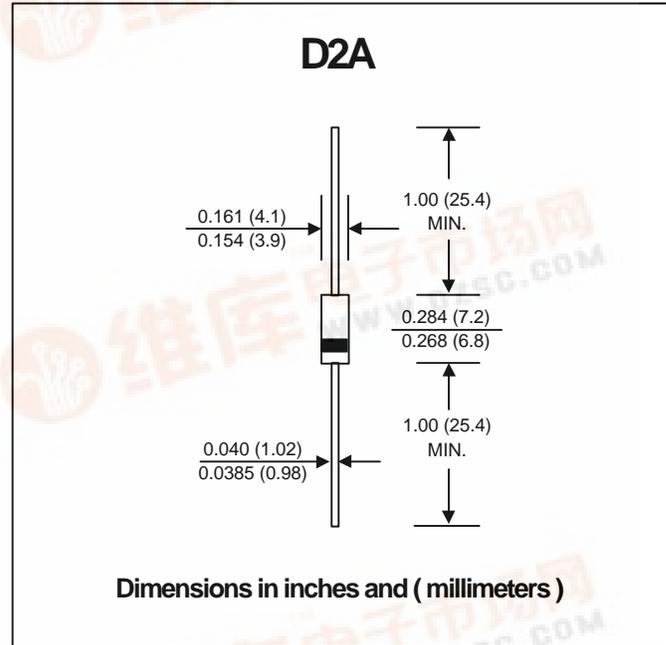
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low cost
- * Low forward voltage drop

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

SCHOTTKY BARRIER RECTIFIER DIODES



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	SB	SB	SB	SB	SB	SB	SB	SB	UNITS	
		520S	530S	540S	550S	560S	570S	580S	590S	5B0S		
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	70	80	90	100	Volts	
Maximum Average Forward Current 0.375", 9.5mm Lead Length See Fig.1	$I_{F(AV)}$	5.0									Amps.	
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	150									Amps.	
Maximum Forward Voltage at $I_F = 5$ Amps. (Note 1)	V_F	0.5			0.67			0.79			Volt.	
Maximum Reverse Current at $T_a = 25\text{ }^\circ\text{C}$	I_R	0.5									mA	
Rated DC Blocking Voltage (Note 1) $T_a = 100\text{ }^\circ\text{C}$	$I_{R(H)}$	50			25						mA	
Junction Temperature Range	T_J	- 65 to + 125				- 65 to + 150					$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	- 65 to + 150										$^\circ\text{C}$



RATING AND CHARACTERISTIC CURVES (SB520S - SB5B0S)

FIG.1 - FORWARD CURRENT DERATING CURVE

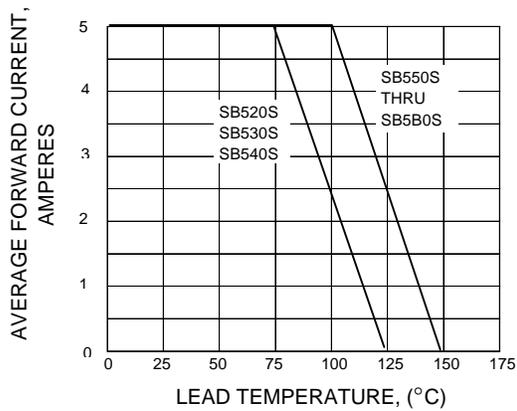


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

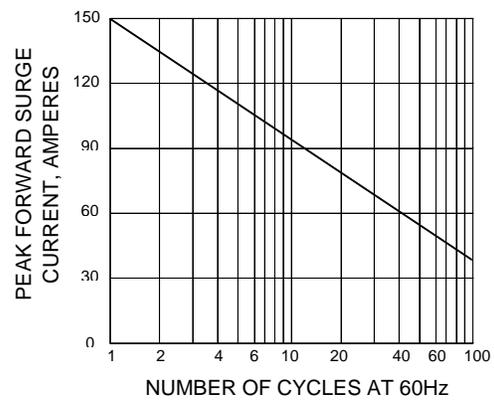


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

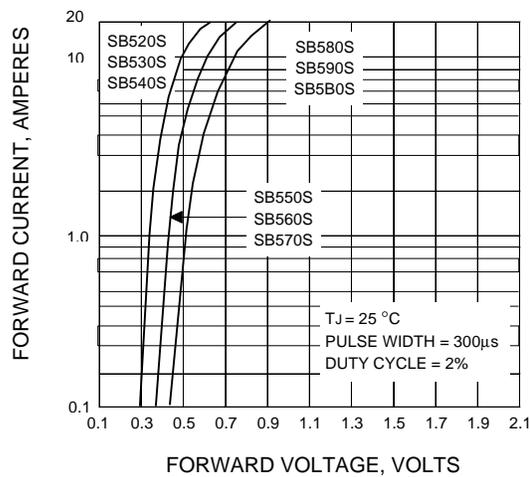


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

