

SB2520 ~ SB2540

PRV : 20 - 40 Volts

I_o : 25 Amperes

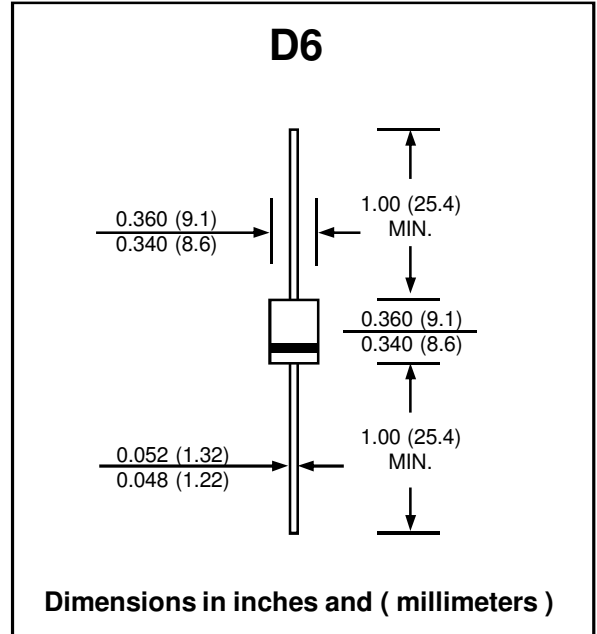
FEATURES :

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

MECHANICAL DATA :

- * Case : Void-free molded plastic body
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 2.1 grams

SCHOTTKY BARRIER RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	SB2520	SB2530	SB2540	UNIT
Maximum Reptitive Peak Reverse Voltage	V _{RRM}	20	30	40	V
Maximum Surge Peak Reverse Voltage	V _{RSM}	20	30	40	V
Maximum Average Forward Current , R-Load, T _a = 50 °C (Note 1)	I _{F(AV)}	25			A
Maximum Repetitive Peak Forward Current , f> 15 Hz (Note 1)	I _{FRM}	25			A
Maximum Peak Forward Surge Current , 50 Hz half sine-wave	I _{FSM}	650			A
Maximum Forward Voltage at I _F = 5 A at I _F = 16 A , T _J = 25 °C	V _F	0.39			V
		0.49			
Maximum Reverse Current at V _R = V _{RRM} , T _J = 25 °C V _R = V _{RRM} , T _J = 100 °C	I _R	600			μA
	I _{R(H)}	40			mA
Typical Thermal Resistance Junction to Lead (Note 2)	R _{θJL}	2.5			K/W
Operating Junction Temperature Range (Note 3)	T _J	- 50 to + 200			°C
Storage Temperature Range	T _{STG}	- 50 to + 175			°C

Notes :

- (1) Valid, if lead are kept at T_A at a distance of 10 mm from case.
- (2) Thermal resistance from junction lead/terminal at a distance 0 mm from case
- (3) Max. Junction temperature T_J ≤ 200°C in bypass mode/DC forward mode

RATING AND CHARACTERISTIC CURVES (SB2520 - SB2540)

FIG.1 - RATE FORWARD CURRENT VS. AMBIENT TEMPERATURE

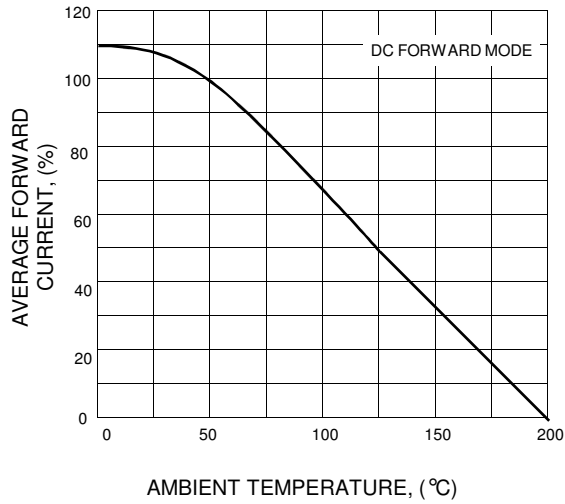


FIG.2 - THERMAL RESISTANCE VS. DISTANCE FROM CASE

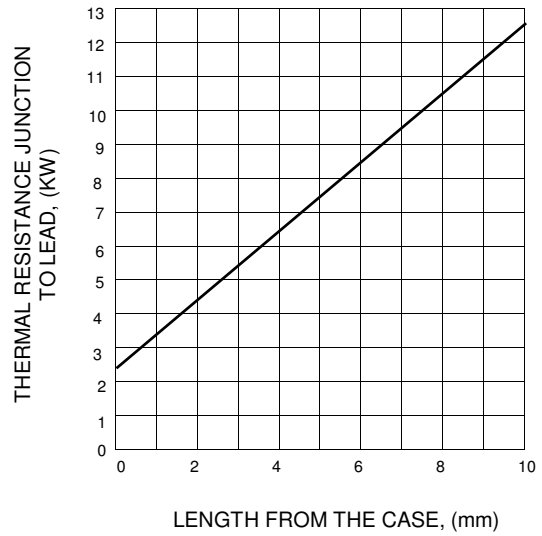


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

