

SD3030

SCHOTTKY BARRIER RECTIFIER DIODE

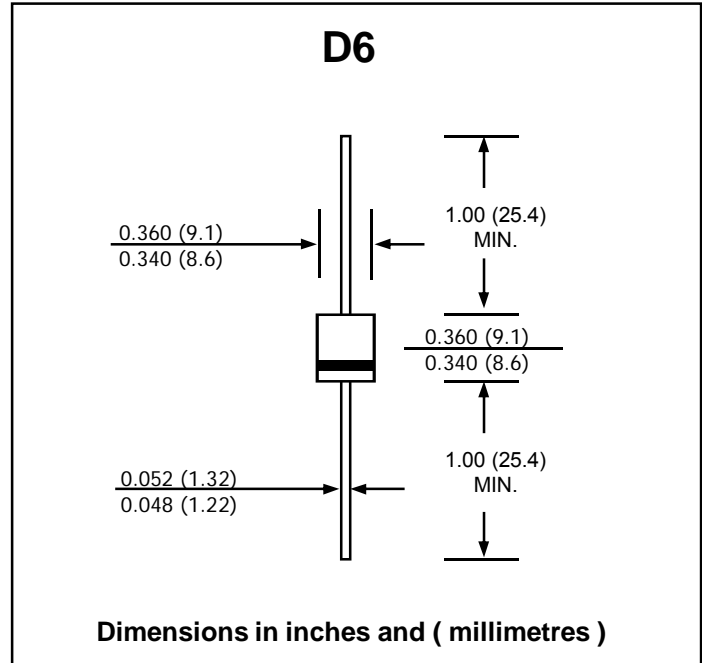
PRV : 30 Volts
I_o : 30 Amperes

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	V
Maximum Surge Peak Reverse Voltage	V _{RSM}	30	V
Maximum Average Forward Current, R-Load at T _a = 70 °C (Note 1)	I _{F(AV)}	30	A
Maximum Peak Forward Surge Current, 50 Hz half sine wave	I _{FSM}	650	A
Maximum Forward Voltage	V _F	at I _F = 5 A , T _J = 25 °C 0.39	V
		at I _F = 30 A , T _J = 25 °C 0.55	
Maximum Reverse Current at	I _R	@ (T _J = 25 °C) 600	μA
at V _R = V _{RRM}		@ (T _J = 125 °C) 70	
Typical Thermal Resistance Junction to Lead (Note 2)	R _{θJL}	1.0	K/W
Operating Junction Temperature Range (T _J ≤ 200 °C in bupass mode (Note 3))	T _J	- 50 to + 150	°C
Storage Temperature Range	T _{STG}	- 50 to + 175	°C

Notes :

- (1) Valid, if leads are kept at ambient temperature at a distance of 6 mm from case.
- (2) Thermal resistance from junction to leas/terminal at distance 0 mm from case.
- (3) Max. Junction Temperature T_J ≤ 150 °C (V_R ≤ 80% V_{RRM}) in reverse mode and T_J ≤ 200 °C in bypass mode.

RATING AND CHARACTERISTIC CURVES (SD3030)

FIG.1 - FORWARD CURRENT DERATING CURVE

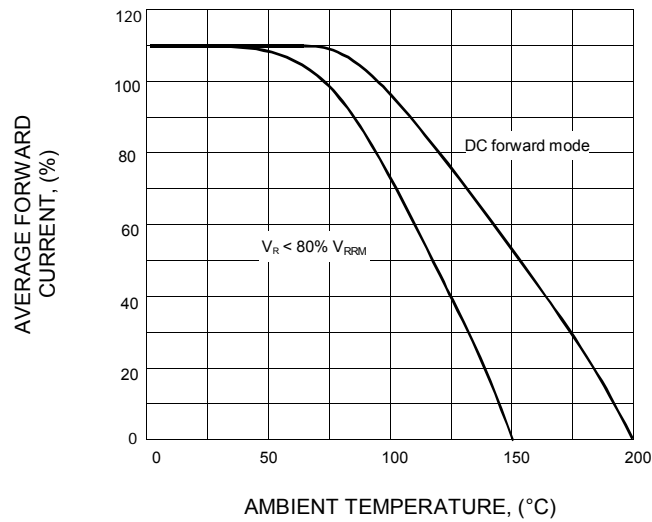


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

