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SD3030MR

SCHOTTKY BARRIER RECTIFIER DIODE

PRV : 30 Volts
Io : 30 Amperes

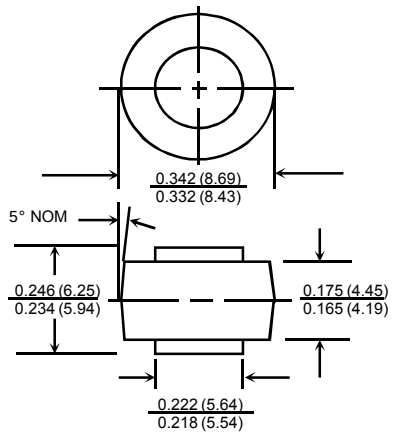
FEATURES :

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

MECHANICAL DATA :

* Case : Molded plastic
* Epoxy : UL94V-0 rate flame retardant
* Polarity : Cathode polarity band
* Mounting position : Any
* Weight : 1.624 grams

MR



Dimensions in inches and (millimetres)

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, at Ta = 70 °C	$I_{F(AV)}$	30	A
Maximum Peak Forward Surge Current, 50 Hz half sine wave	I_{FSM}	650	A
Maximum Forward Voltage at I_F = 5 A , T_J = 25 °C	V_F	0.39	V
Maximum Forward Voltage at I_F = 30 A , T_J = 25 °C	V_F	0.55	V
Maximum Reverse Current at @ (T_J = 25 °C)	I_R	600	µA
at $V_R = V_{RRM}$ @ (T_J = 125 °C)	$I_{R(H)}$	70	mA
Typical Thermal Resistance Junction to Lead (Note 1)	$R_{\Theta JL}$	1.0	K/W
Operating Junction Temperature Range ($T_J \leq$ 200 °C in bypass mode (Note 2))	T_J	- 50 to + 150	°C
Storage Temperature Range	T_{STG}	- 50 to + 175	°C

Notes :

(1) Thermal resistance from junction to leas/terminal at distance 0 mm from case.

(2) Max. Junction Temperature $T_J \leq$150 °C($V_R \leq$80% V_{RRM}) in reverse mode and $T_J \leq$ 200 °C in bypass mode.

RATING AND CHARACTERISTIC CURVES (SD3030MR)

FIG.1 - FORWARD CURRENT DERATING CURVE

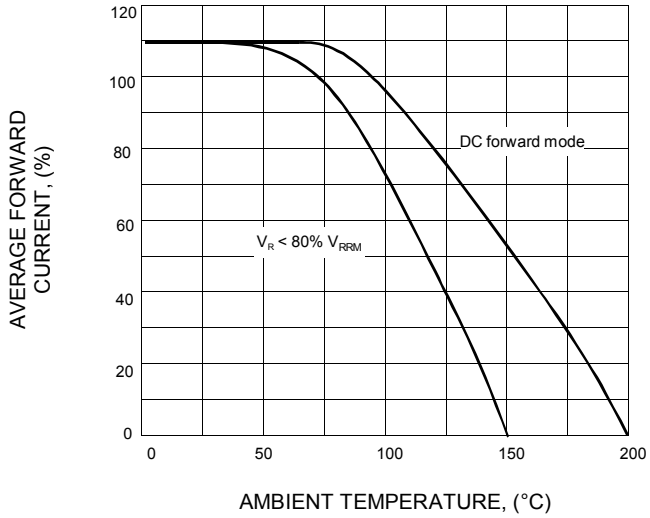


FIG.2 - TYPICAL FORWARD CHARACTERISTICS