

MBR150 ~ MBR160

SCHOTTKY BARRIER RECTIFIER DIODES

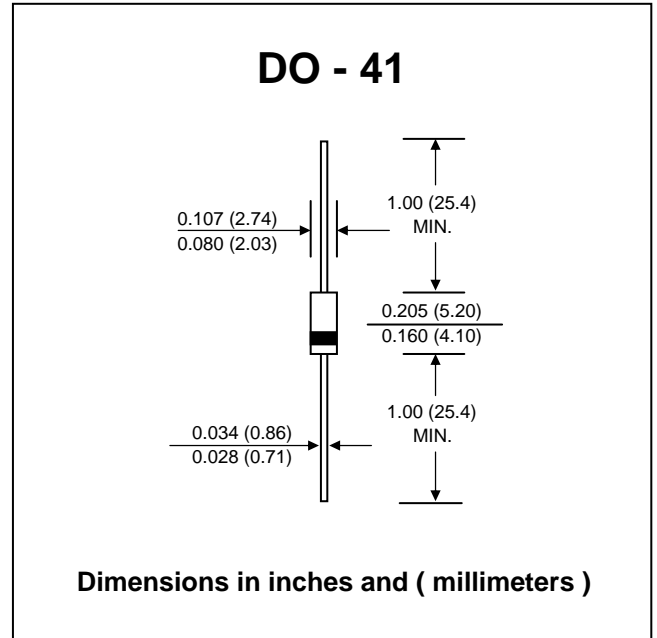
PRV : 50 - 60 Volts
I_o : 1.0 Ampere

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 : DO-41 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 : 0.312 gram



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	MBR150	MBR160	UNIT
Maximum Peak Repetitive Reverse Voltage	V _{RRM}	50	60	V
Maximum Working Peak Reverse Voltage	V _{RMS}	50	60	V
Maximum DC Blocking Voltage	V _{bc}	50	60	V
Maximum Average Forward Current , Ta = 55 °C	I _{F(AV)}	1.0		A
Maximum Non-repetitive Peak Surge Current, (Surge applied at rated load conditions, Half wave, single phase 60 Hz, T _L = 70°C)	I _{FSM}	25		A
Maximum Instantaneous Forward Voltage at I _F = 1.0 A ⁽¹⁾	V _F	0.75		V
Maximum Reverse Current at Rated DC Blocking Voltage ⁽¹⁾	I _R	0.5 (T _L = 25 °C)		mA
	I _{R(H)}	5.0 (T _L = 25 °C)		mA
Maximum Peak Operation Junction Temperature	T _{J(PK)}	150		°C
Operating and Storage Junction Temperature Range	T _J , T _{STG}	- 65 to + 150		°C

Note :

(1) Pulse Test : Pulse Width = 300µs, Duty Cycle = 2%

RATING AND CHARACTERISTIC CURVES (MBR150 - MBR160)

FIG.1 - FORWARD CURRENT DERATING CURVE

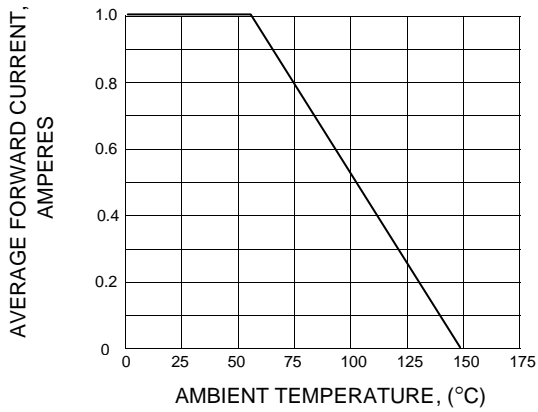


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

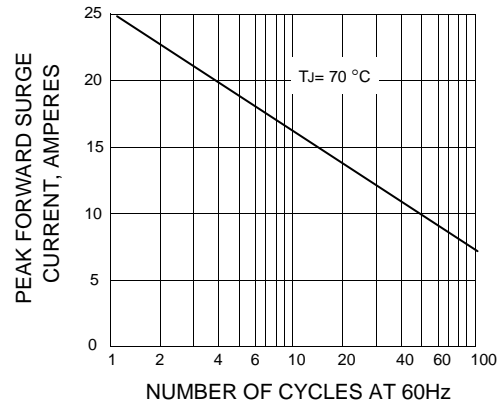


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

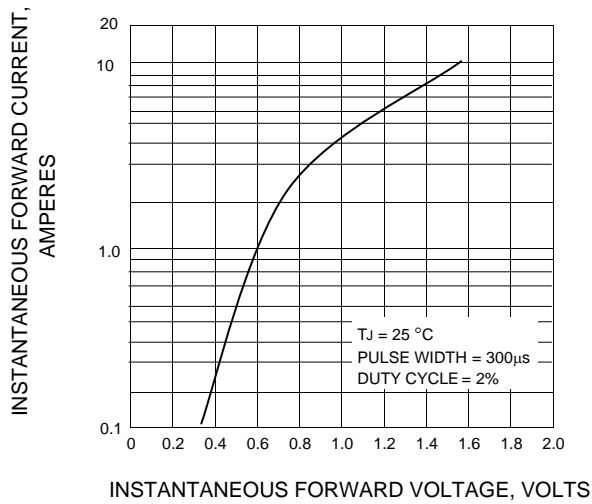


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

