

# RM10 - RM10Z

**PRV : 200 - 800 Volts**  
**Io : 1.2 - 1.5 Amperes**

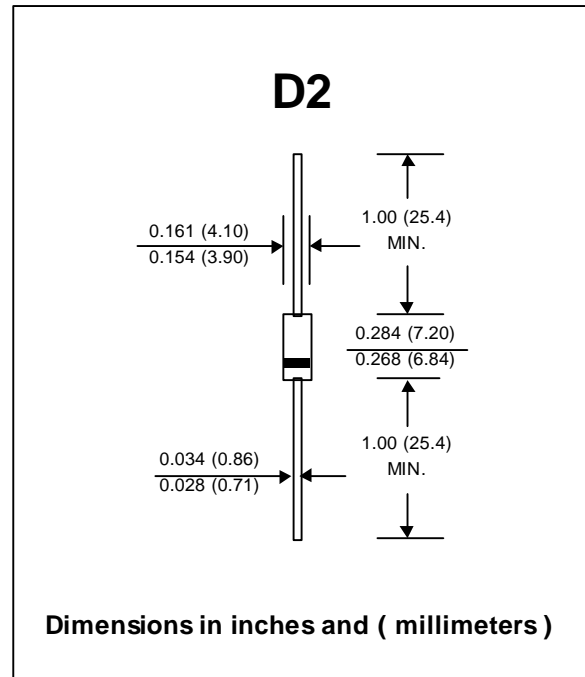
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

## MECHANICAL DATA :

- \* Case : D2 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 : 0.465 gram

# SILICON 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%.

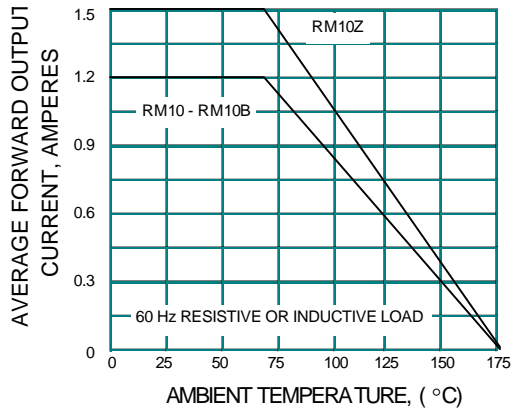
RATING	SYMBOL	RM10Z	RM10	RM10A	RM10B	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	Volts
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 70^\circ\text{C}$	$I_F$	1.5	1.2			Amps.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	120	150			Amps.
Maximum Forward Voltage at $I_F = 1.5$ Amps.	$V_F$	0.91				Volts
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_R$	10				$\mu\text{A}$
	$I_{R(H)}$	50				$\mu\text{A}$
Typical Junction Capacitance (Note1)	$C_J$	30				pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	50				$^\circ\text{C/W}$
Junction Temperature Range	$T_J$	- 65 to + 175				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175				$^\circ\text{C}$

## Notes :

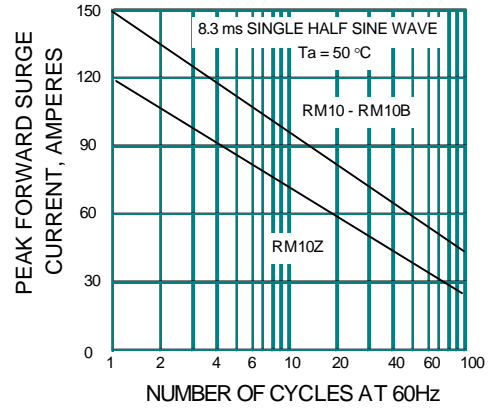
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>DC</sub>
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES ( RM10 - RM10Z )

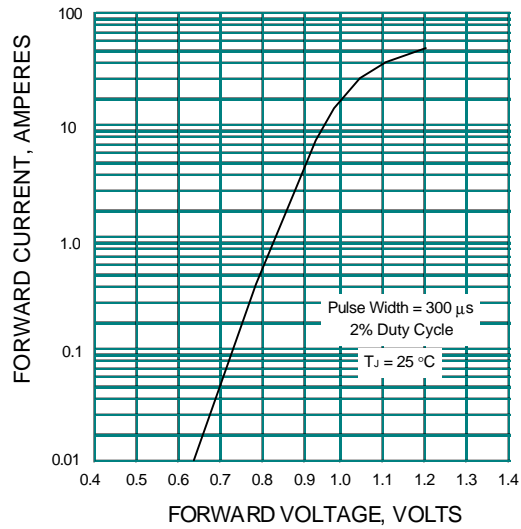
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

