

## RK33 - RK39

**PRV : 30 - 90 Volts**  
**I<sub>o</sub> : 2.0 - 2.5 Amperes**

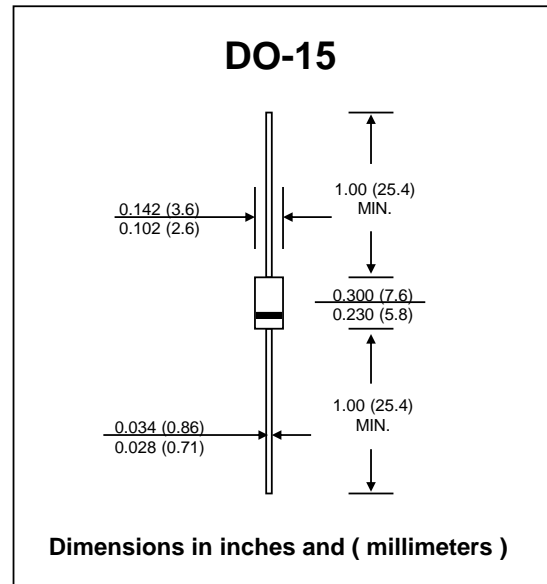
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* High efficiency
- \* Low power loss
- \* Low cost
- \* Low forward voltage drop
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : D2A 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 : 0.645 gram

## SCHOTTKY BARRIER 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%.

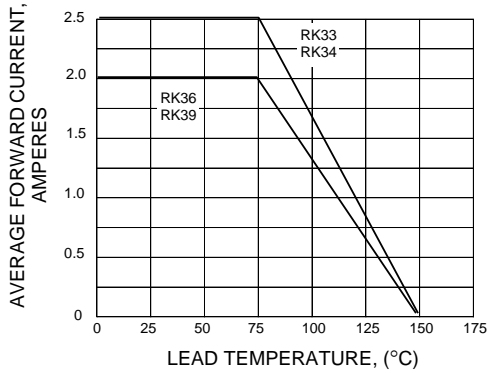
RATING	SYMBOL	RK33	RK34	RK36	RK39	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	40	60	90	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	40	60	90	V
Maximum Average Forward Current T <sub>L</sub> = 75 °C	I <sub>F(AV)</sub>	2.5		2.0		A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method) T <sub>L</sub> = 75°C	I <sub>FSM</sub>	50		40	50	A
Maximum Forward Voltage at Forward current	V <sub>F</sub>	0.55		0.62	0.81	V
	I <sub>F</sub>	2.5		2.0		A
Maximum Reverse Current at V <sub>RM</sub> T <sub>a</sub> = 25 °C	I <sub>R</sub>	5.0		2.0	3.0	mA
Maximum Reverse Current at V <sub>RM</sub> T <sub>a</sub> = 100 °C	I <sub>R(H)</sub>	50		20	15	
Junction Temperature Range	T <sub>J</sub>	- 40 to + 125				°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 125				°C

#### Note :

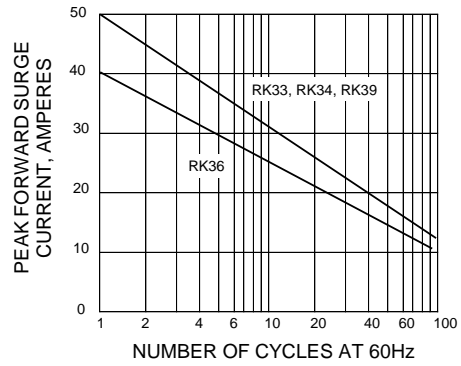
(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.

**RATING AND CHARACTERISTIC CURVES ( RK33 - RK39 )**

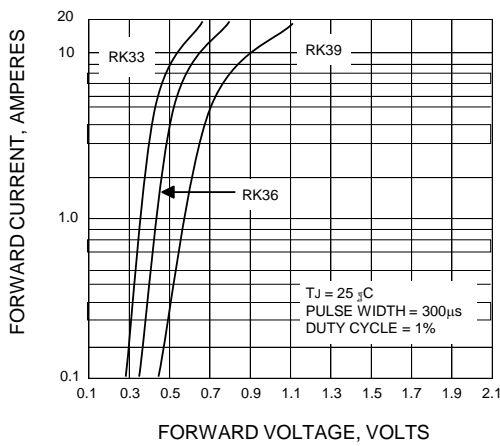
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

