RK13 - RK19

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 30 - 90 Volts
Io : 1.5 - 1.7 Amperes

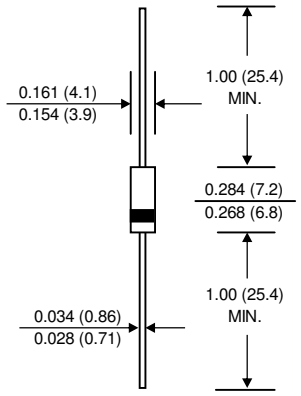
FEATURES :

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

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

D2



Dimensions in inches and (millimeters)

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	RK13	RK14	RK16	RK19	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	60	90	V
Maximum DC Blocking Voltage	V_{DC}	30	40	60	90	V
Maximum Average Forward Current T_L = 75 °C	$I_{F(AV)}$	1.7		1.5		A
Maximum Peak Forward Surge Current single half sine wave Superimposed on rated load	I_{FSM}	50				A
Maximum Forward Voltage at I_F (Note 1)	V_F	0.55		0.62	0.81	V
Maximum Forward Current	I_F	2.0		1.5		V
Maximum Reverse Current at Rated DC Blocking Voltage (Note 1)	I_R	5.1		1.0	2	mA
Junction Temperature Range	T_J	- 40 to + 125				°C
Storage Temperature Range	T_{STG}	- 40 to + 125				°C

Note :

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

RATING AND CHARACTERISTIC CURVES (RK13 - RK19)

FIG.1 - FORWARD CURRENT DERATING CURVE

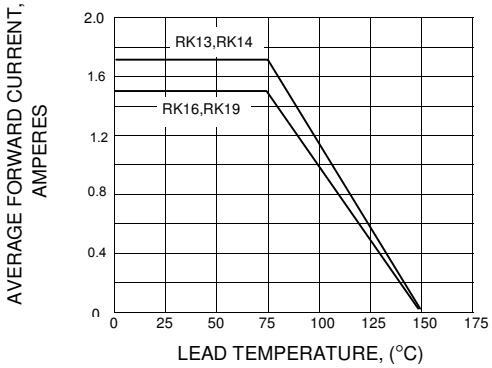


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

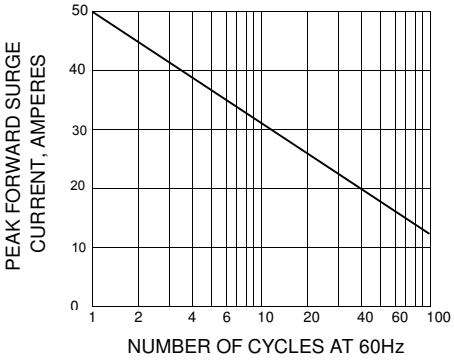


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

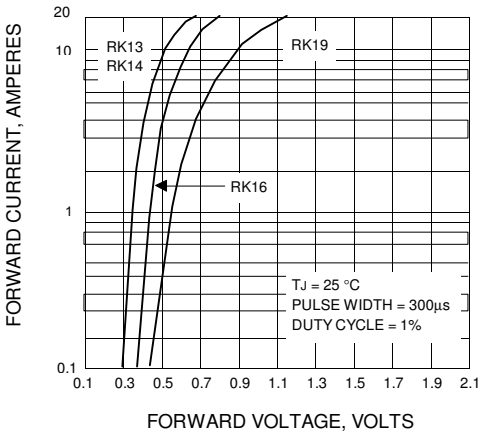


FIG.4 - TYPICAL REVERSE CHARACTERISTICS