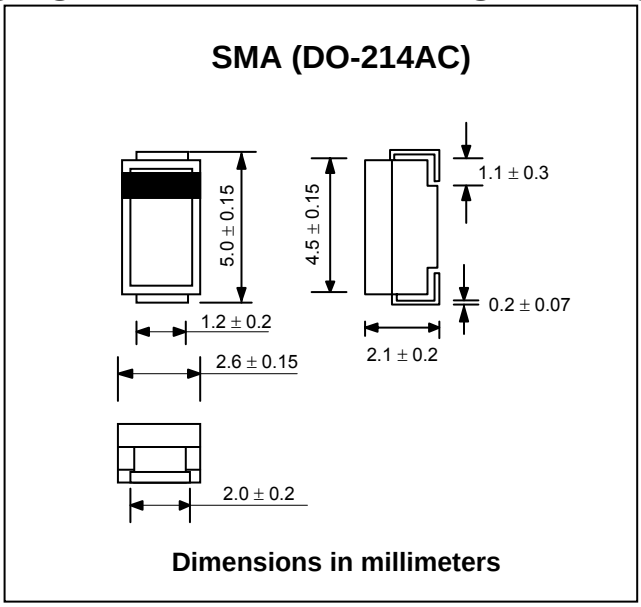
SK32A - SK310A

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

PRV : 20 - 100 Volts
Io : 3.0 Amperes



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 : SMA (DO-214AC) Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Lead Formed for Surface Mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.067 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	SK 32A	SK 33A	SK 34A	SK 35A	SK 36A	SK 38A	SK 310A	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current at T_J = 120 °C	$I_{F(AV)}$	3.0							A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							A
Maximum Forward Voltage at I_F = 3.0 A	V_F	0.5			0.75		0.85		V
Maximum Reverse Current at Ta = 25 °C	I_R	0.5							mA
Rated DC Blocking Voltage (Note 1) Ta = 100 °C	$I_{R(H)}$	20							mA
Maximum Thermal Resistance (Junction to Case)	$R_{\Theta JC}$	10							°C/W
Junction Temperature Range	T_J	- 65 to + 125							°C
Storage Temperature Range	T_{STG}	- 65 to + 150							°C

Note :

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

RATING AND CHARACTERISTIC CURVES (SK32A - SK3BA)

FIG.1 - FORWARD CURRENT DERATING CURVE

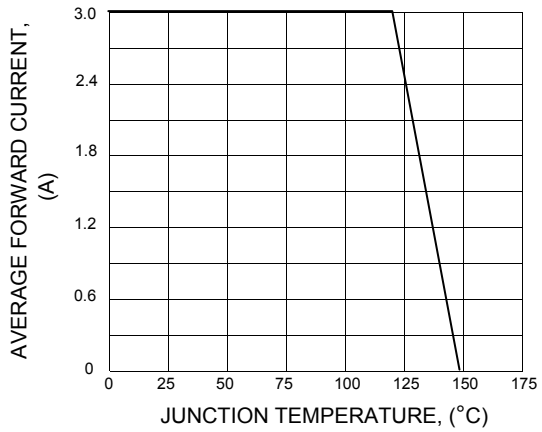


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

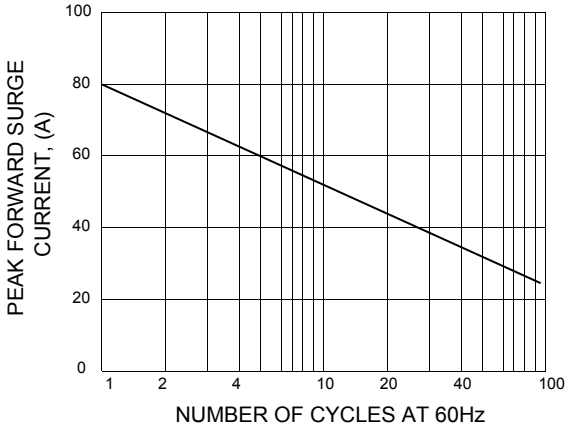


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

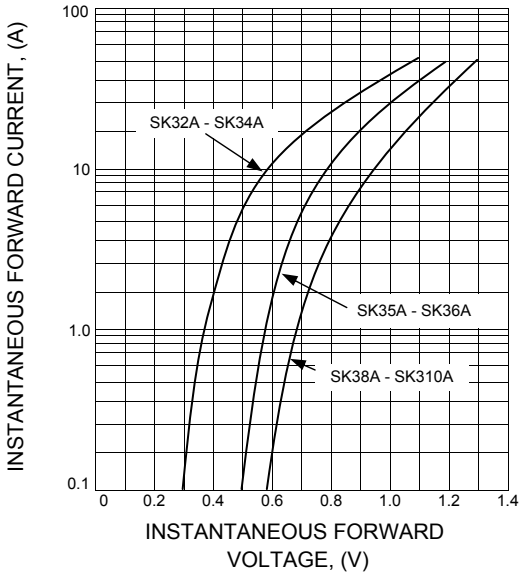


FIG.4 - TYPICAL REVERSE CHARACTERISTICS