

# SKT2S - SKTBS

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

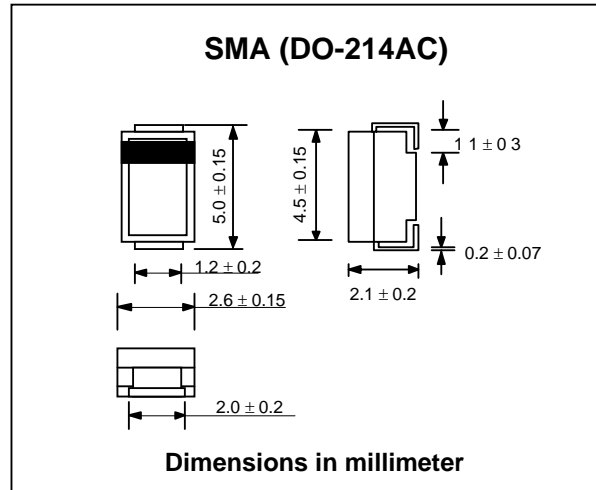
**PRV : 20 - 100 Volts**  
**I<sub>o</sub> : 2.5 Amperes**

### 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 : 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 specific.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

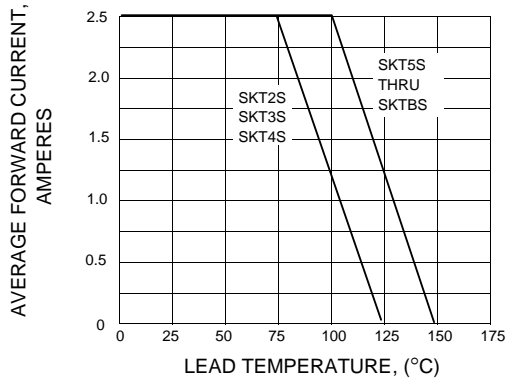
| RATING  | SYMBOL             | SKT 2S        | SKT 3S | SKT 4S | SKT 5S | SKT 6S        | SKT 7S | SKT 8S | SKT 9S | SKT BS | UNIT |
|---|--------------------|---------------|--------|--------|--------|---------------|--------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>   | 20            | 30     | 40     | 50     | 60            | 70     | 80     | 90     | 100    | V    |
| Maximum RMS Voltage   | V <sub>RMS</sub>   | 14            | 21     | 28     | 35     | 42            | 49     | 56     | 63     | 70     | V    |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>    | 20            | 30     | 40     | 50     | 60            | 70     | 80     | 90     | 100    | V    |
| Maximum Average Forward Current See Fig.1   | I <sub>F(AV)</sub> | 2.5           |        |        |        |               |        |        |        |        | A    |
| Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>   | 75            |        |        |        |               |        |        |        |        | A    |
| Maximum Forward Voltage at I <sub>F</sub> = 2.5 A (Note 1)  | V <sub>F</sub>     | 0.5           |        |        | 0.74   |               |        | 0.79   |        |        | V    |
| Maximum Reverse Current at Rated DC Blocking Voltage (Note 1)   | I <sub>R</sub>     | 0.5           |        |        |        |               |        |        |        |        | mA   |
| Junction Temperature Range  | T <sub>J</sub>     | - 65 to + 125 |        |        |        | - 65 to + 150 |        |        |        |        | °C   |
| Storage Temperature Range   | T <sub>STG</sub>   | - 65 to + 150 |        |        |        |               |        |        |        |        | °C   |

### Note :

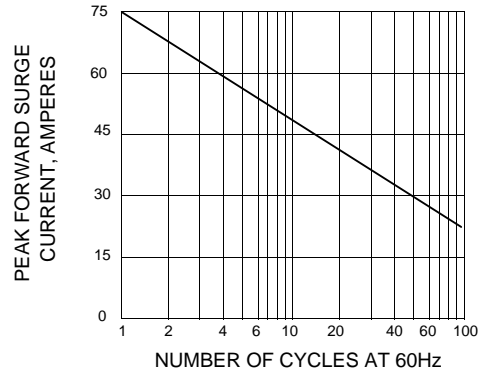
(1) Pulse Test : Pulse Width = 300µs, Duty Cycle = 2%.

## RATING AND CHARACTERISTIC CURVES ( SKT2S - SKTBS )

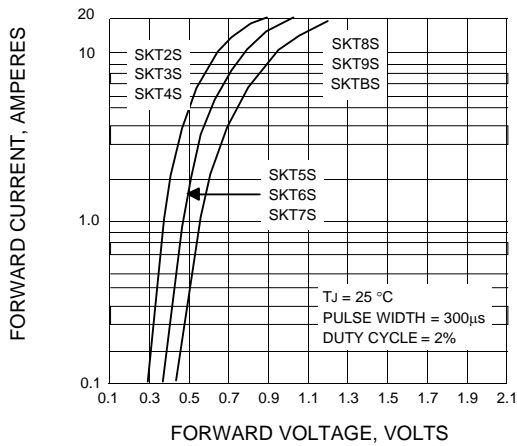
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

