

## Surface Mount Schottky Barrier Rectifier

### FEATURES

- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Meets environmental standard MIL-S-19500D
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 250 °C, 10 s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



DO-214AA (SMB)

### TYPICAL APPLICATIONS

For use in general purpose rectification of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	3 A
$V_{RRM}$	20V to 60 V
$I_{FSM}$	120A
$V_F$	0.50V&0.70V
$T_J \text{ max.}$	125 °C

### MECHANICAL DATA

**Case:** DO-214AC, molded epoxy body, Epoxy meets UL 94V-0 flammability rating

**Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD22B-106

**Polarity:** Laser Band Denotes Cathode Band

MAXIMUM RATINGS (TA = 25 °C unless otherwise noted)							
PARAMETER	SYMBOL	SK32B	SK33B	SK34B	SK35B	SK36B	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	V
Maximum average forward rectified current at TL (See Fig.1)	$I_{F(AV)}$	3					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	100					A
Operating junction temperature range	$T_J$	- 55 to + 125					°C
Storage temperature range	$T_{stg}$	- 55 to + 125					°C

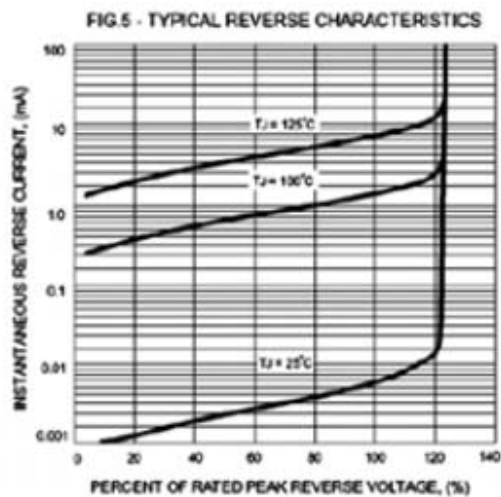
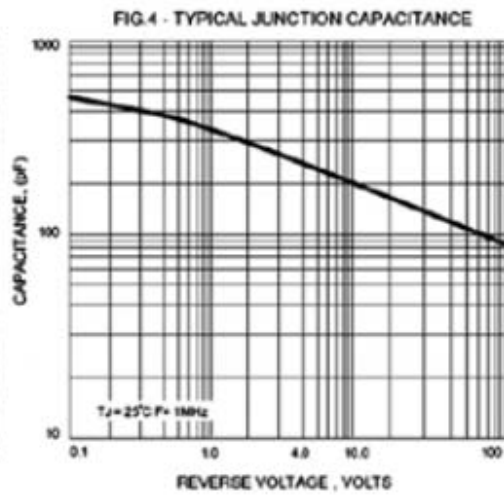
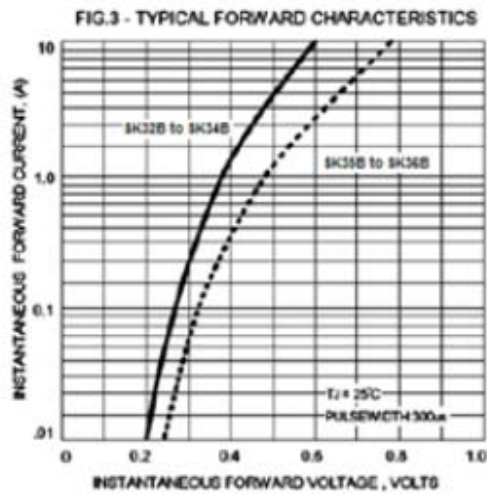
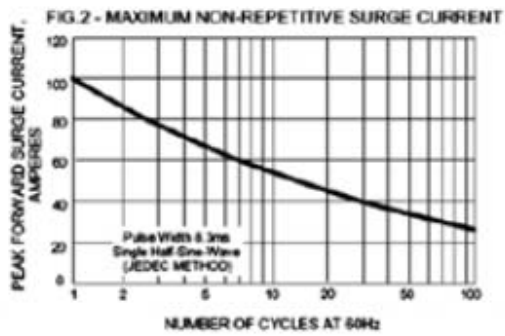
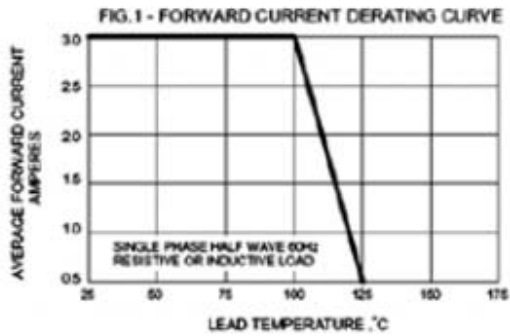


# SK32B thru SK36B

ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)								
PARAMETER	TEST CONDITIONS	SYMBOL	SK32B	SK33B	SK34B	SK35B	SK36B	UNIT
Maximum instantaneous forward voltage	IF=3A	VF	0.50			0.70		V
Maximum DC reverse current at rated DC blocking voltage	TJ=25°C	IR	0.5					mA
	TJ=100°C		20					
Typical junction capacitance	4.0 V, 1 MHz	CJ	250					pF
Typical thermal resistance		RθJA (1)	50					°C/W
		RθJT (2)	10					

Notes: (1) Thermal resistance from junction to ambient, 0.3×0.3" (8.0×8.0mm) copper pads to each terminal  
 (2) Thermal resistance from junction to terminal, 0.3×0.3" (8.0×8.0mm) copper pads to each terminal

## RATINGS AND CHARACTERISTICS CURVES ( $T_A = 25^\circ\text{C}$ unless otherwise noted)





# SK32B thru SK36B

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

