

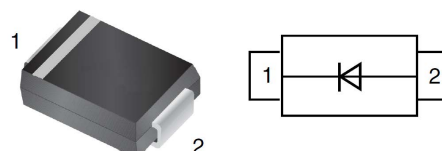
Schottky Barrier Rectifier in DO-214AB/SMC

Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature

Mechanical Data

- **Case:** DO-214AB/SMC (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals



Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

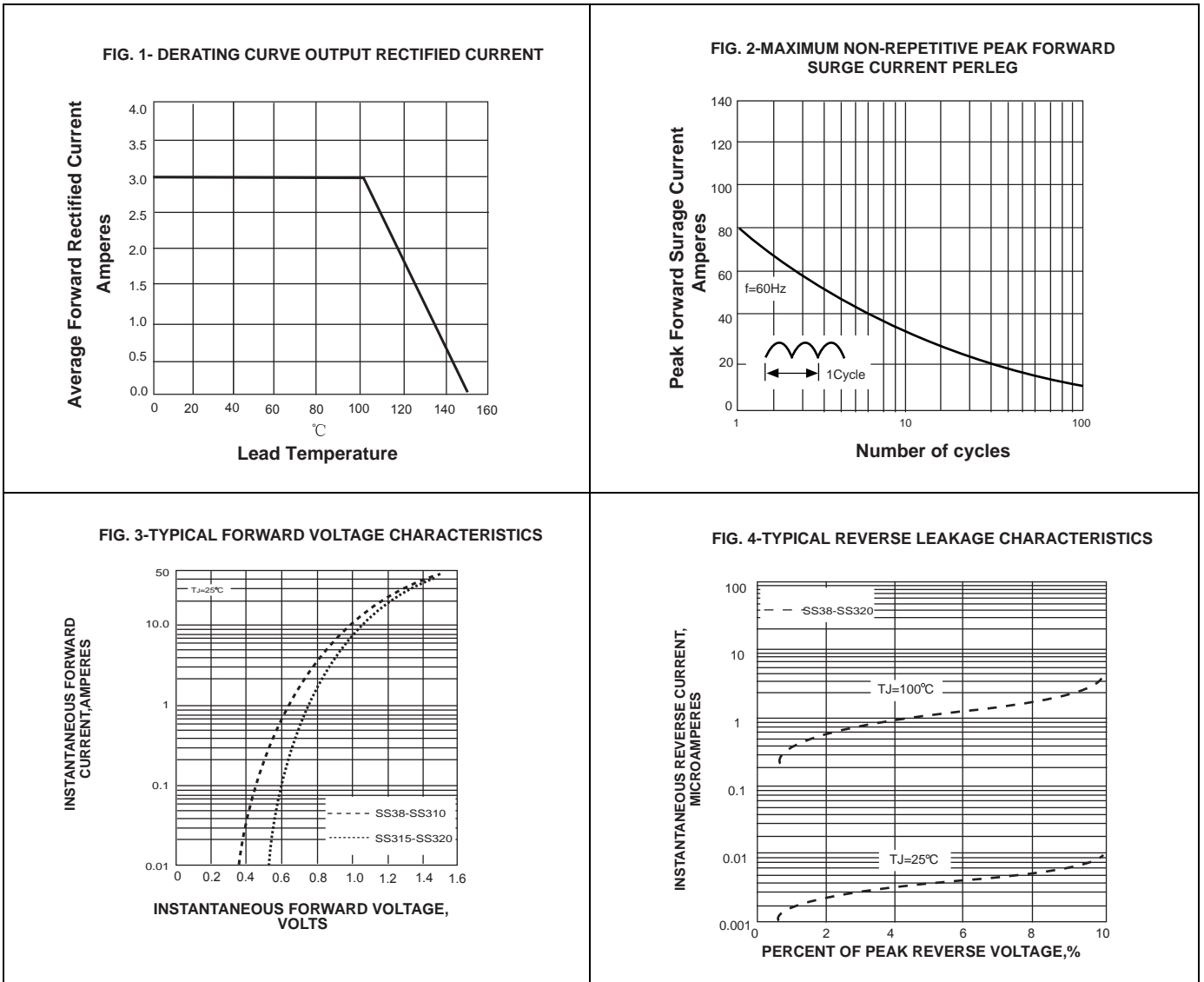
Absolute Maximum Ratings							
Ratings at 25 °C, ambient temperature unless otherwise specified							
Parameter	Symbol	SK38	SK39	SK310	SK315	SK320	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	80	90	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum average forward rectified current	$I_{F(AV)}$	3.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	100					A
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150					°C

Electrical Characteristics								
(T _A = 25 °C unless otherwise specified)								
Parameter	Test Conditions	Symbol	SK38	SK39	SK310	SK315	SK320	Unit
Maximum instantaneous forward voltage	$I_F=3A, T_A=25^\circ C$	V_F	0.85			0.95		V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ C$	I_R	0.50					mA
	$T_A=125^\circ C$		20					
Typical junction capacitance	4.0 V, 1 MHz	C_J	250					pF

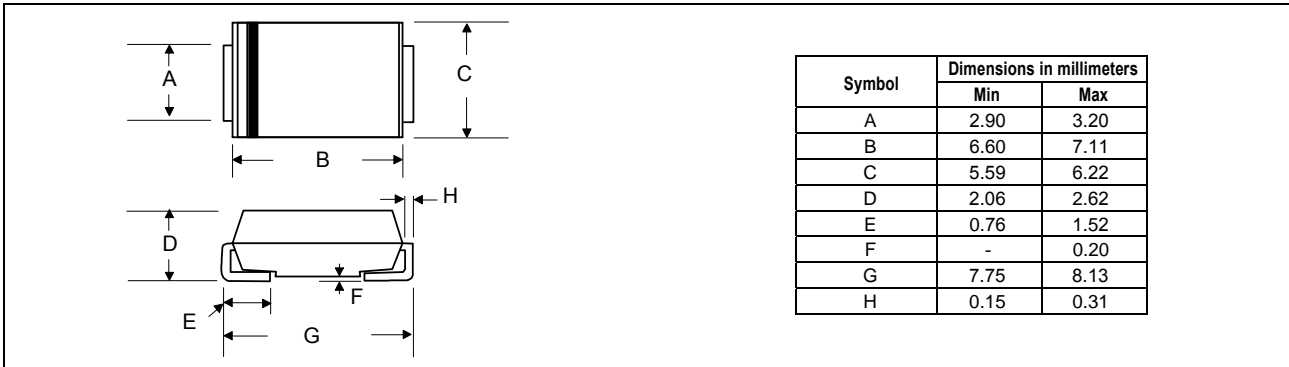
Thermal Characteristics							
Parameter	Symbol	SK38A	SK39A	SK310A	SK315A	SK320A	Unit
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	77					°C/W
	$R_{\theta JC}$	40					
	$R_{\theta JI}$	18					

Note1: Thermal resistance from junction to lead, mounted on PCB with 5.0x5.0mm copper pads

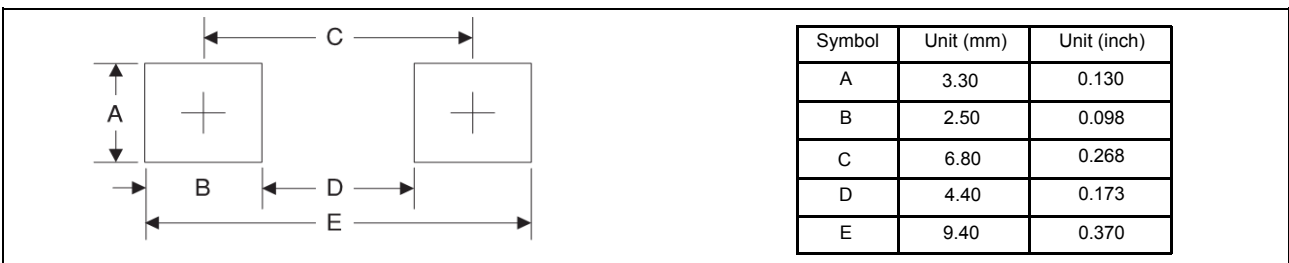
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



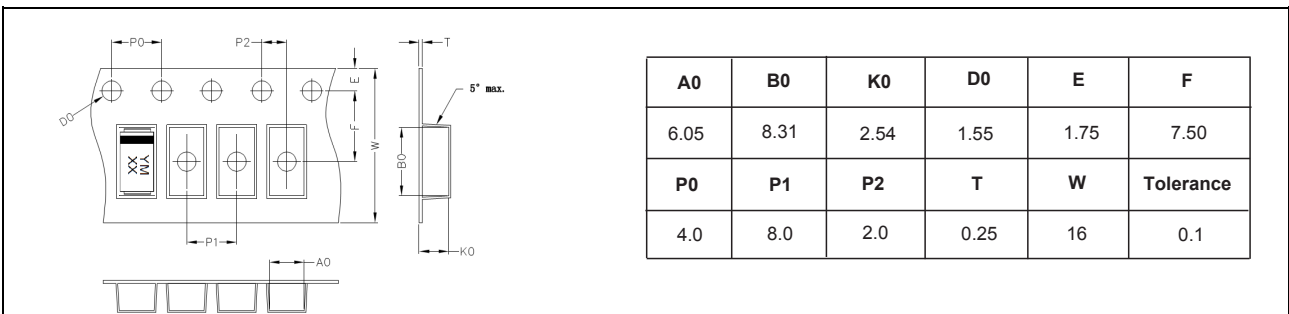
Package Dimensions



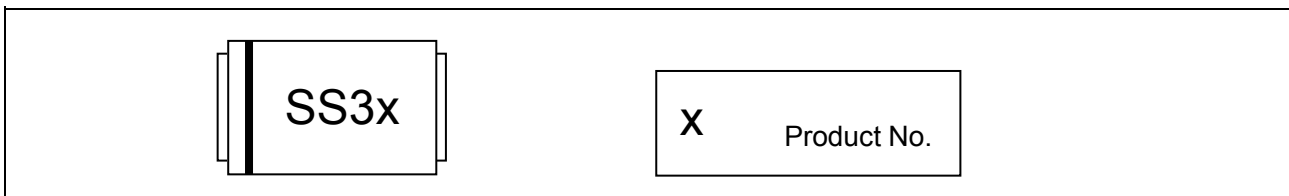
PAD Dimensions



Packing Information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SK38 Thur SK320	DO-214AB/SMC	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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