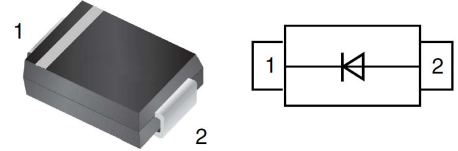


Schottky Barrier Rectifier in DO-214AB/SMC

Features

- Schottky barrier diodes
- Low forward voltage drop
- High Junction Temperature
- Moisture sensitivity: level 1, per J-STD-020



Mechanical Data

- **Case:** DO-214AB/SMC (plastic package).
Lead free; RoHS compliant; Halogen-free
- **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

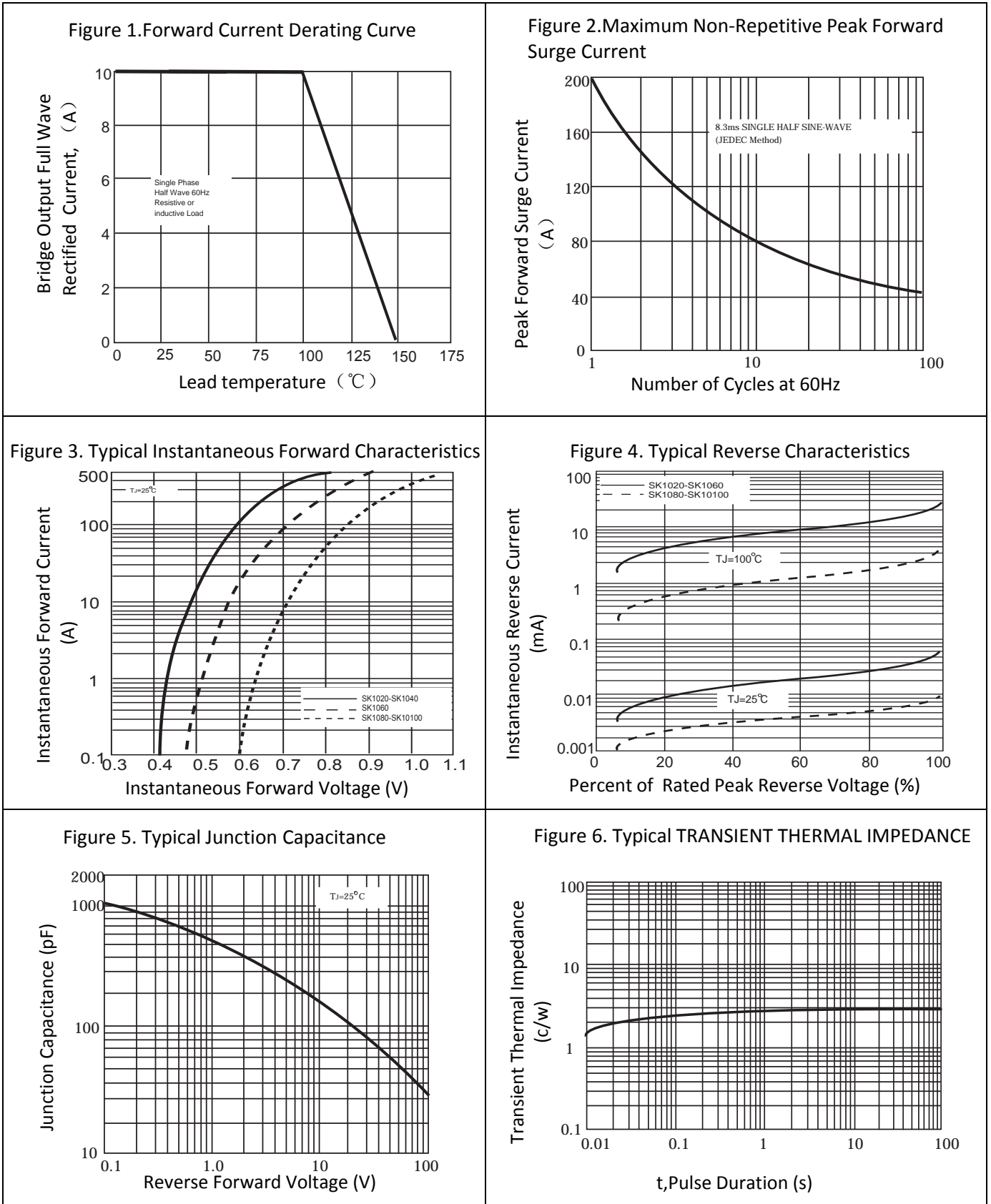
Absolute Maximum Ratings							
Ratings at 25 °C, ambient temperature unless otherwise specified							
Parameter	Symbol	SK1020	SK1040	SK1060	SK1080	SK10100	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	V
Maximum average forward rectified current	$I_{F(AV)}$	10.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	200					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	SK1020	SK1040	SK1060	SK1080	SK10100	Unit
Maximum instantaneous forward voltage	$I_F=10A, T_A=25^\circ C$	V_F	0.55		0.7	0.85		V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ C$	I_R	0.5			0.05		mA
	$T_A=125^\circ C$		50			10		
Typical junction capacitance	4.0 V, 1 MHz	C_J	300					pF

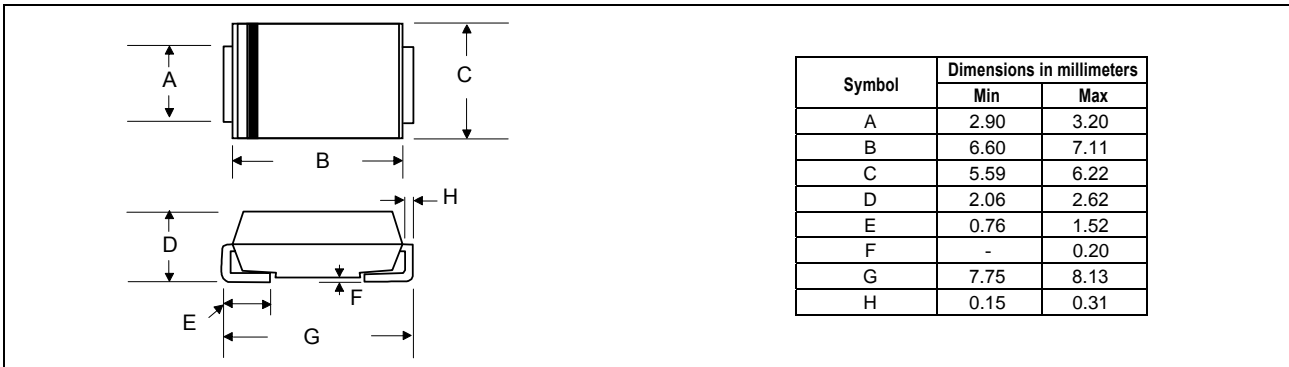
Thermal Characteristics							
Parameter	Symbol	SK1020	SK1040	SK1060	SK1080	SK10100	Unit
Typical thermal resistance ⁽¹⁾	$R_{\theta JA}$	60					°C/W

Note1: Thermal resistance from junction to lead, mounted on PCB with 16.0x16.0mm copper pads

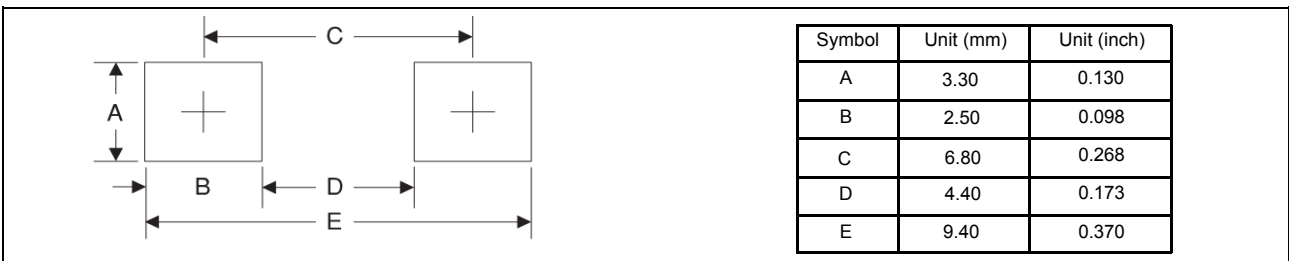
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



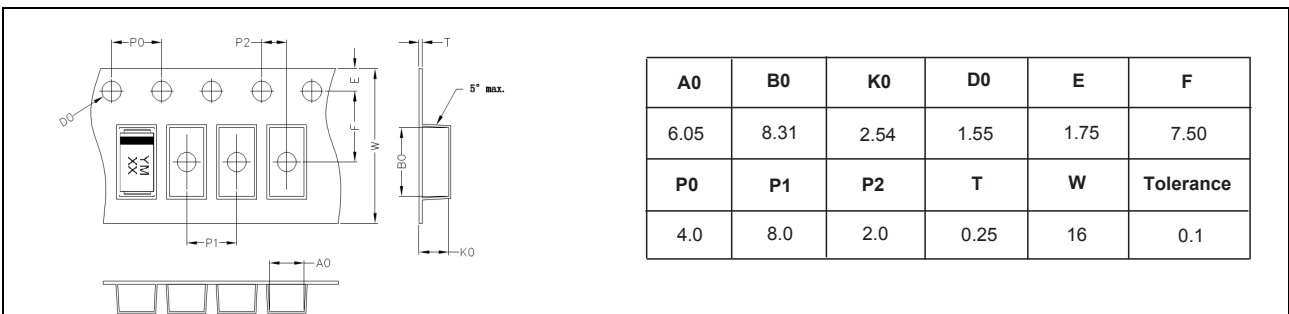
Package Dimensions



PAD Dimensions



Packing Information



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
SK1020 thru SK10100	DO-214AB/SMC	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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