

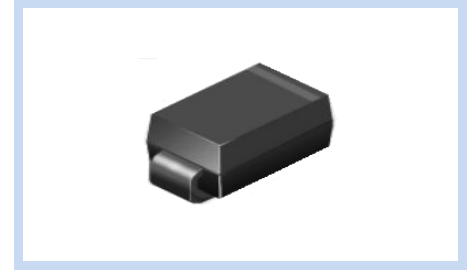
Schottky Barrier Rectifier DO-214AA SMB Package

SK12B to SK120B

MERITEK

FEATURE

- Glass Passivated Die Construction
- Low Profile Construction
- Built-in Strain Relief
- UL Flammability Classification Rating 94V-0
- Superfast Recovery Times for High Efficiency



ELECTRICAL CHARACTERISTICS

Parameter	Symbol	SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK110B	SK115B	SK120B
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	20V	30V	40V	50V	60V	80V	100V	150V	200V
Maximum RMS Voltage	V_{RMS}	14V	21V	28V	35V	42V	56V	71V	105V	140V
Maximum DC Blocking Voltage	V_{DC}	20V	30V	40V	50V	60V	80V	100V	150V	200V
Maximum Average Forward Rectified Current	I_{AV}	1.0A								
Peak Forward Surge Current (JEDEC method)	I_{FSM}	30.0A								
Maximum Forward Voltage at 2.0A	V_F	0.50V	0.55V	0.70V		0.85V		0.95V		
Maximum Reverse Current at Rated DC Blocking Voltage	$T_J = 25^\circ\text{C}$	I_R	0.5mA							
	$T_J = 125^\circ\text{C}$		10.0mA							
Typical Thermal Resistance	$R_{\theta JA}$	88.0°C/W								
	$R_{\theta JL}$	28.0°C/W								
Operating Junction Temperature	T_J	-65 ~ 125°C				-65 ~ 150°C				
Storage Temperature	T_{stg}	-65 ~ 150°C								

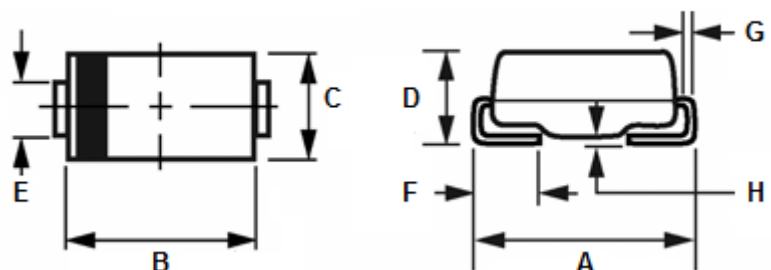
Notes:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. P.C.B. mounted with 5.0 x 5.0mm copper pad areas
3. $T_A = 25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

DIMENSIONS

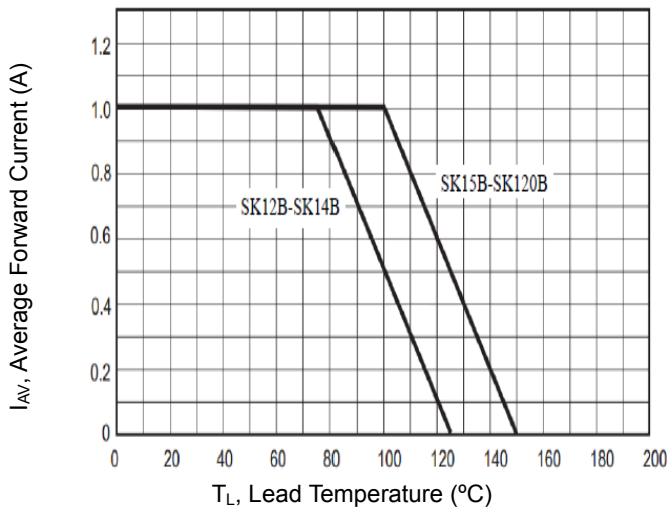
Item	Min (mm)	Max (mm)
A	5.08	5.59
B	4.02	4.85
C	3.26	3.94
D	2.11	2.44
E	1.91	2.20
F	0.76	1.52
G	0.152	0.305
H	0.000	0.203

DO-214AA (SMB)

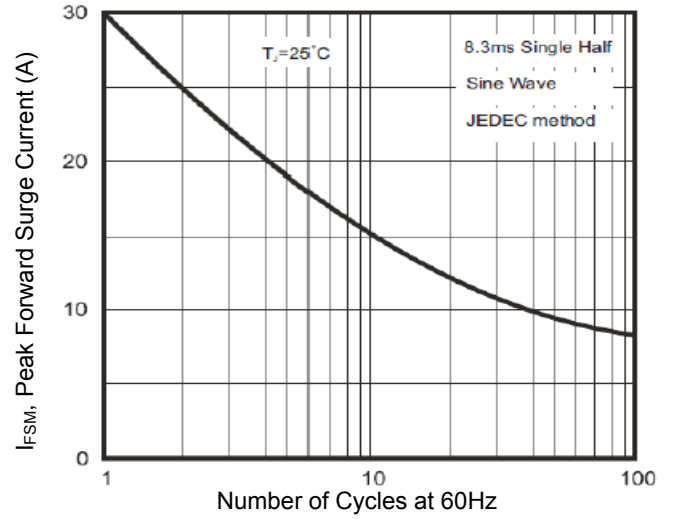


CHARACTERISTIC CURVES

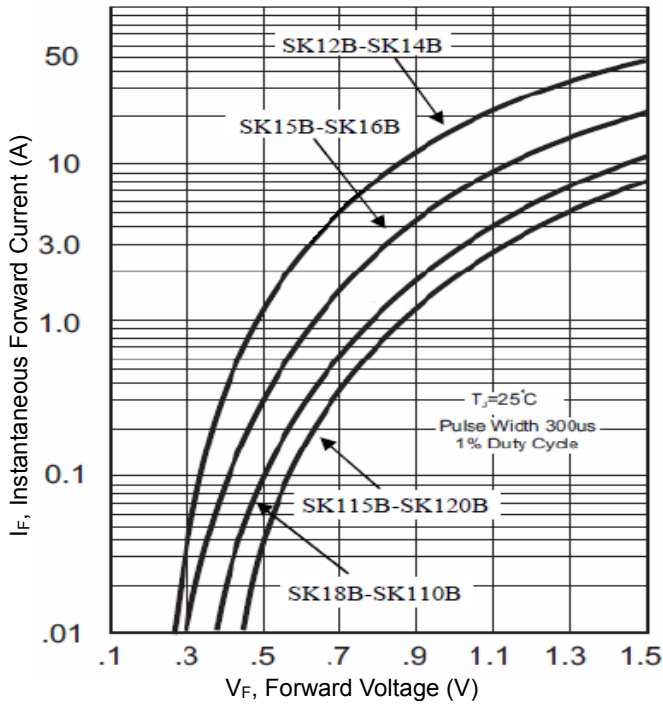
Typical Forward Current Derating Curve



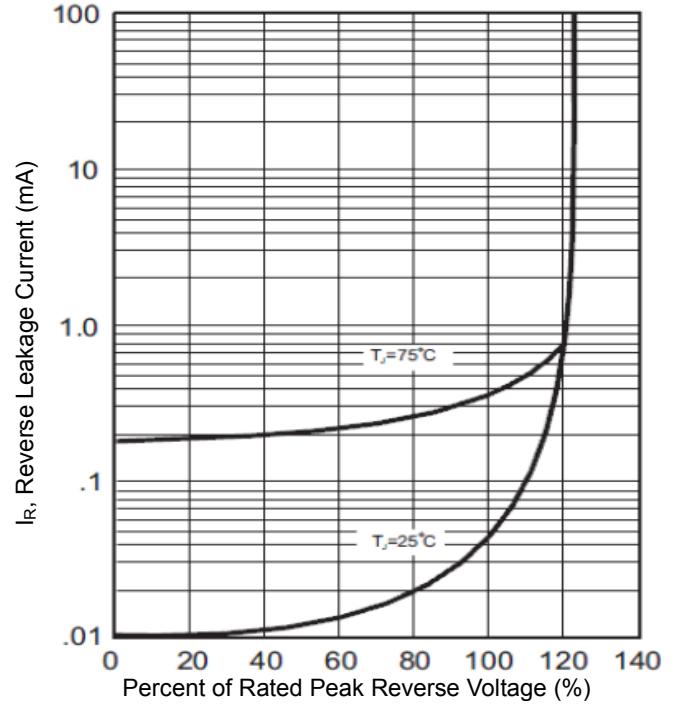
Maximum Non-Repetitive Forward Surge Current



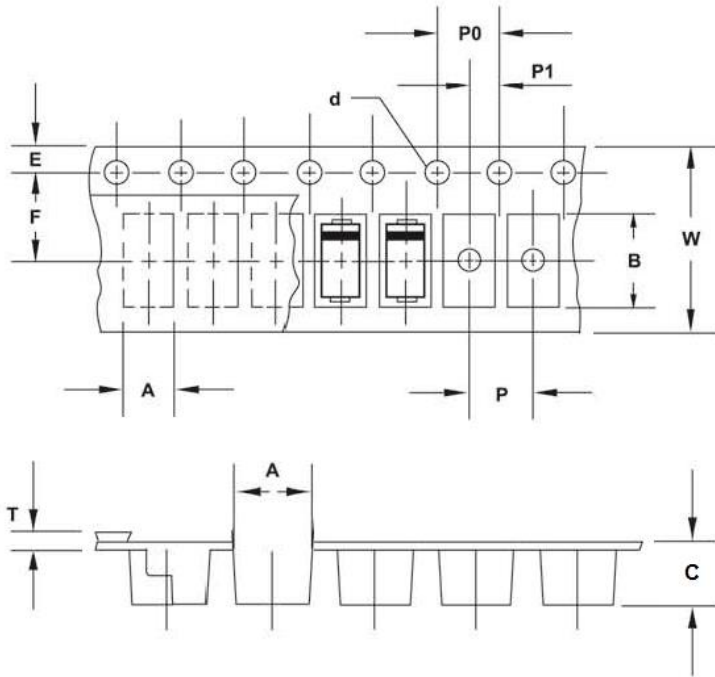
Typical Forward Characteristics



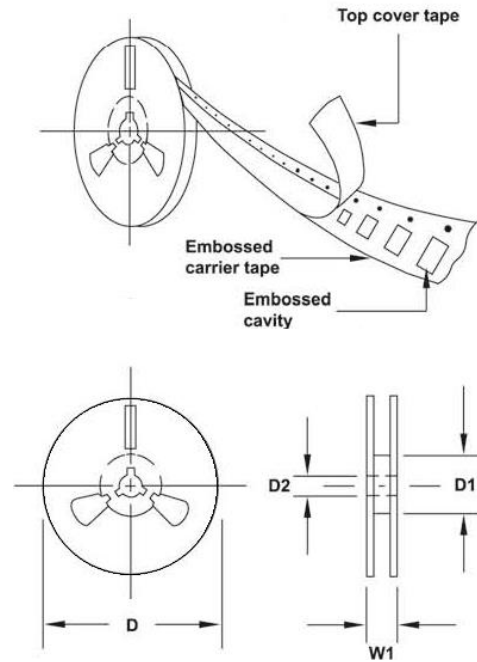
Typical Reverse Characteristics



PACKAGING SPECIFICATION- DO214AA (SMB) - Tape Carrier and Reel



DO-214AA(SMB) - Tape carrier



DO-214AA(SMB) - Reel

DO-214AA (SMB)	Symbol	Size (mm)
Carrier width	A	3.77 ± 0.10
Carrier length	B	5.70 ± 0.10
Carrier depth	C	2.40 ± 0.10
Sprocket hole	d	1.55 ± 0.10
Reel outside diameter	D	330.0 ± 2.0
Reel inner diameter	D1	Min 50
Feed hole diameter	D2	13.00 ± 0.50
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	5.50 ± 0.05
Punch hole pitch	P	8.00 ± 0.10
Sprocket hole pitch	P0	4.00 ± 0.10
Embossment center	P1	2.00 ± 0.05
Overall tape thickness	T	Max 0.4
Tape width	W	12.00 ± 0.30
Reel width	W1	Max 18.40

*Specifications subject to change without notice.