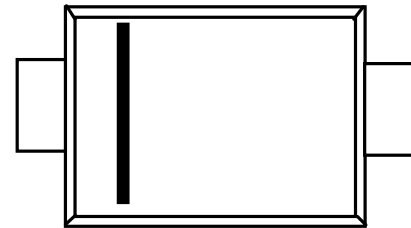


»Features

- Super fast switching time for high efficiency
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



**SMB(DO-214AA)**

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SMB Plastic Package

» Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half wave 60HZ. resistive or inductive load. For capacitive load current derate by 20%

TYPE NUMBER	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100							A
Maximum Instantaneous Forward Voltage at 3.0A	1.1							V
Maximum DC Reverse Current a=25°C	5.0							µA
at Rated DC Blocking Voltage a=100°C	50							µA
Typical Junction Capacitance (Note 1)	40							pF
Typical Thermal Resistance R JA (Note 2)	30							°C/W
Operating and Storage Temperature Range Tj, TSTG	-65 — +175							°C

»Typical Performance Characteristics ((T<sub>J</sub> = 25 °C, unless otherwise noted))

FIG.1-TYPICAL FORWARD CHARACTERISTICS

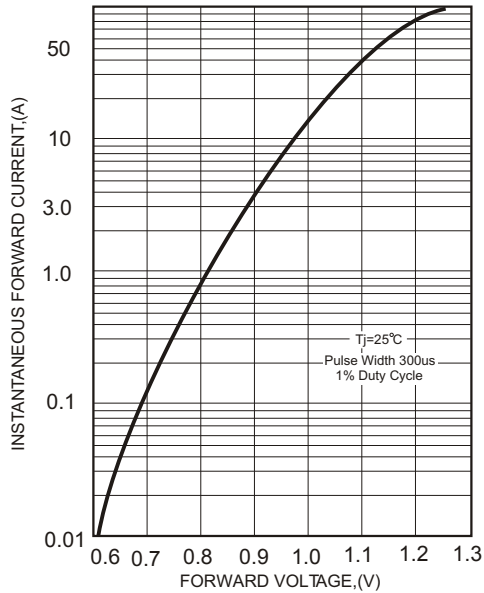


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

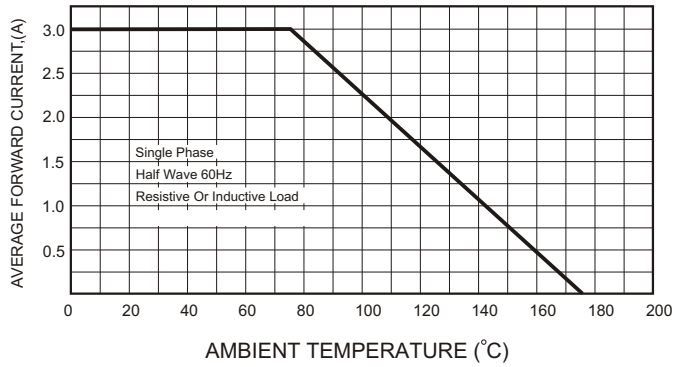


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

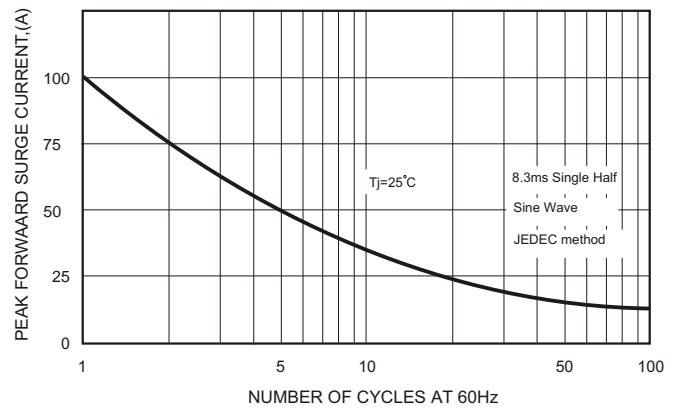


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

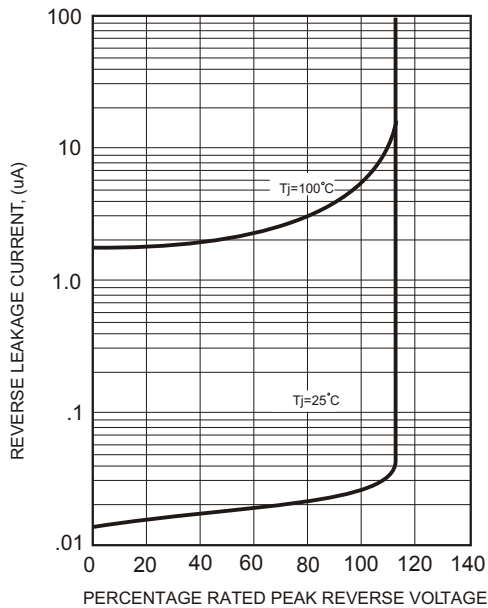
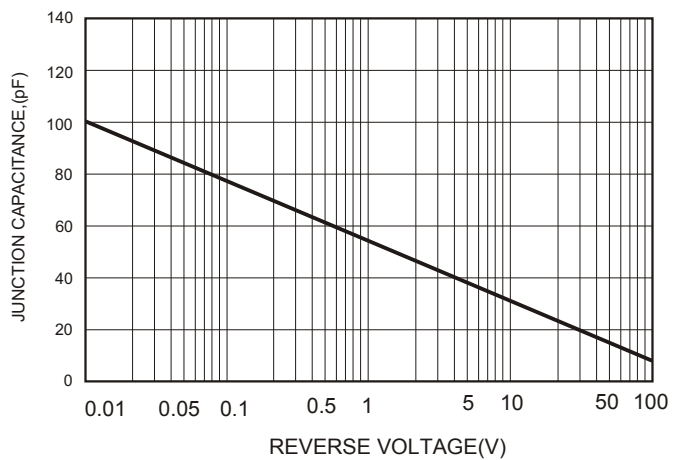
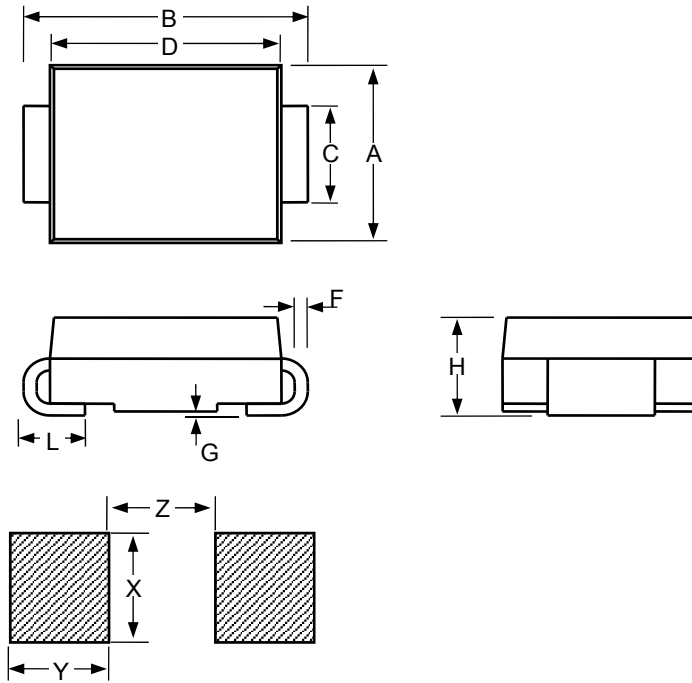


FIG.5-TYPICAL JUNCTION CAPACITANCE



»Package Information

**SMB**



SMB						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.134	0.144	0.155	3.4	3.67	3.94
B	0.205	0.213	0.22	5.21	5.4	5.59
C	0.075	0.079	0.083	1.9	2	2.1
D	0.169		0.185	4.3		4.7
F	0.006		0.012	0.152		0.305
G	-		0.008	-		0.203
H	0.085	0.091	0.096	2.15	2.3	2.45
L	0.03		0.06	0.76		1.52
X		0.11			2.8	
Y		0.079			2	
Z		0.079			2	