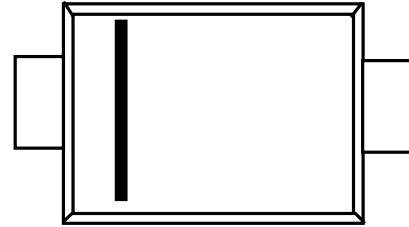


»Features

- Low reverse leakage
- High forward surge capability
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



SMB(DO-214AA)

»General Description

- Case: SMB molded plastic
- Polarity: Color band denotes cathode
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free
- High temperature soldering guaranteed:260°C/10seconds

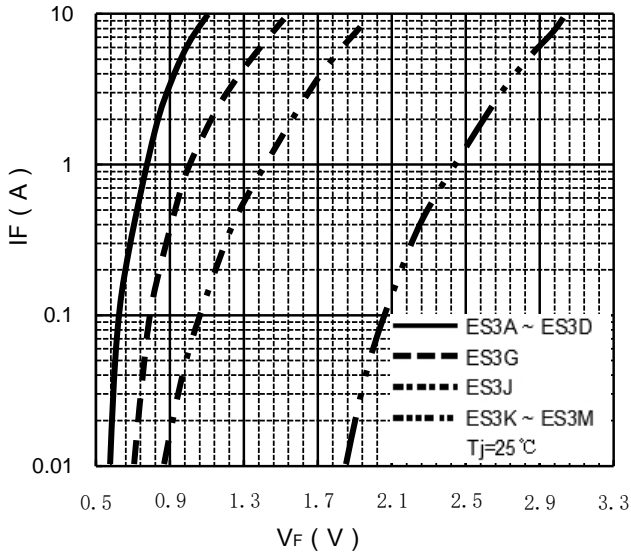
» Maximum Ratings and Characteristics @ TA = 25°C unless otherwise noted

Parameter	SYMBOLS	ES3A	ES3B	ES3D	ES3G	ES3J	ES3K	ES3M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	3.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	80					60		A
Maximum forward voltage @ IF=3.0A	V_F	0.95		1.25	1.7	3.2		V	
Maximum reverse current @VDC	I_R	5.0							μA
	$T_A=125^{\circ}C$	100							
Maximum Reverse Recovery Time @ IF=0.5A, IR=1.0A, IRR=0.25A	t_{rr}	35							nS
Type junction capacitance @VR=4.0V,f=1MHz	C_J	60							pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	85							°C/W
Operating Junction Temperature Range	T_J	-55 to +150							°C
Storage Temperature Rang	T_{stg}	-55 to +150							°C

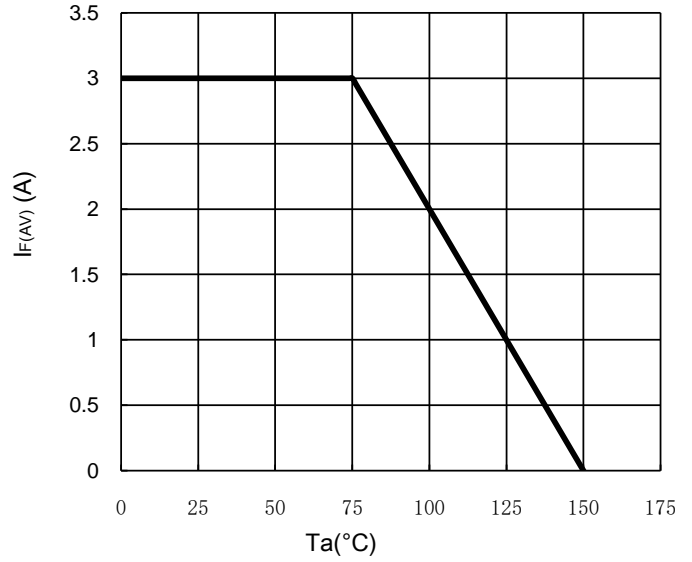
Note: (1)Thermal resistance from junction to ambient, PCB mounted.

»Typical Performance Characteristics ((T_J = 25 °C, unless otherwise noted))

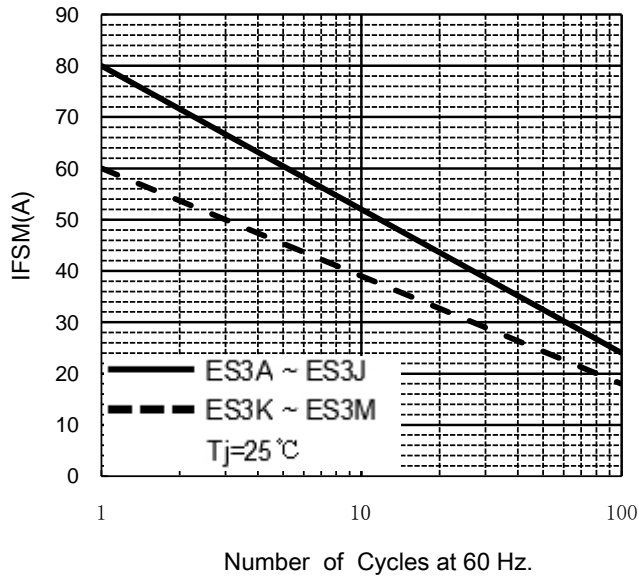
TYPICAL FORWARD CHARACTERISTIC



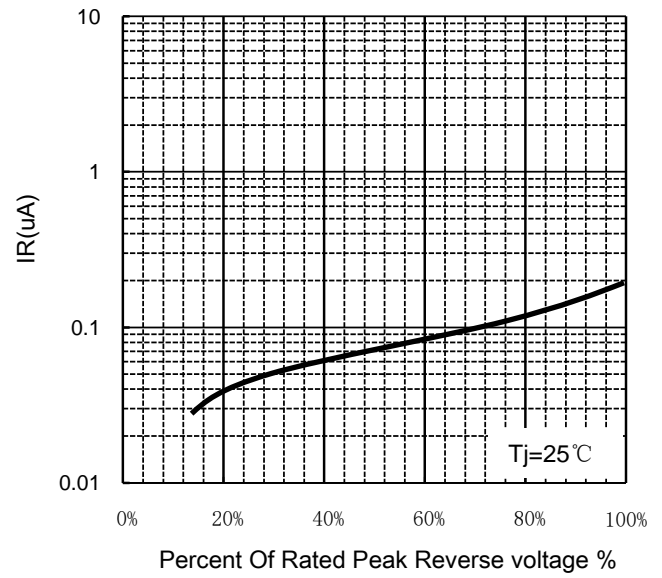
FORWARD CURRENT DERATING CURVE



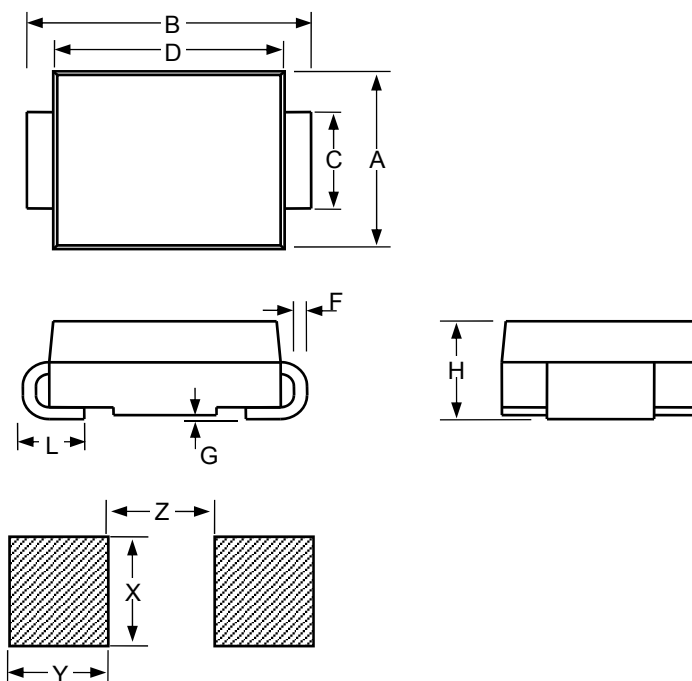
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS



»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	0.201	0.213	0.224	5.1	5.4	5.7
C	0.067	0.079	0.091	1.7	2	2.3
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	

»Ordering information

Part Number	ES3A	ES3B	ES3D	ES3G	ES3J	ES3K	ES3M
Marking	ES3A	ES3B	ES3D	ES3G	ES3J	ES3K	ES3M
Base qty	3K	3K	3K	3K	3K	3K	3K