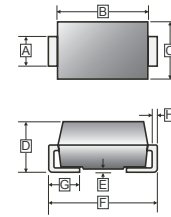


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Reverse Current

SMB (DO-214AA)



MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable per MIL-STD-202 Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.91	2.20	E	-	0.203
B	4.06	4.70	F	5.08	5.59
C	3.30	3.94	G	0.76	1.52
D	2.13	2.44	H	0.15	0.305

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

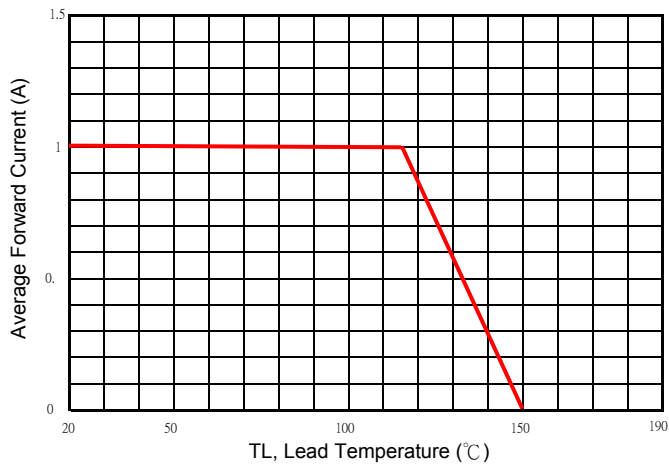
TYPE NUMBER	SYMBOL	SM1150B	UNITS
Peak Repetitive Peak reverse voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}		
Maximum DC Blocking Voltage	V_R		
Average Forward Current @ $T_J=25^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Current @ 8.3 ms Half Sine	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage	V_F	0.85	V
V_F @ $I_{FM} = 1.0 \text{ A}$		0.67	
Maximum Reverse Current At V_{RRM} Voltage	I_R	0.1	mA
(Note 3)		5	
Typical Junction Capacitance (Note 1)	C_J	65	pF
Typical Thermal Resistance Note 2)	$R_{\theta JL}$	25	$^\circ\text{C/W}$
Voltage Rate of Change (Rated V_R)	dv/dt	10000	$\text{V}/\mu\text{s}$
Operating Temperature Range	T_J	-50~150	$^\circ\text{C}$
Storage temperature	T_{STG}	-65~150	$^\circ\text{C}$

NOTES:

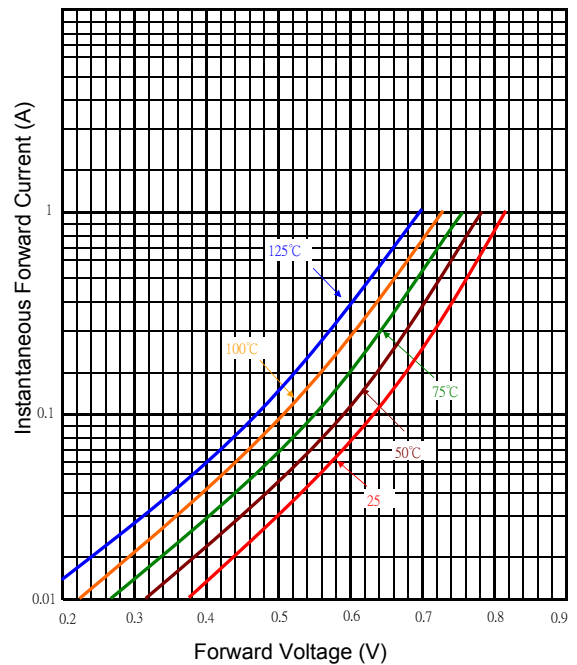
1. Measured at 1MHz and applied reverse voltage of 0 V D.C.
2. Thermal Resistance Junction to Lead.
3. Pulse test: 300us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

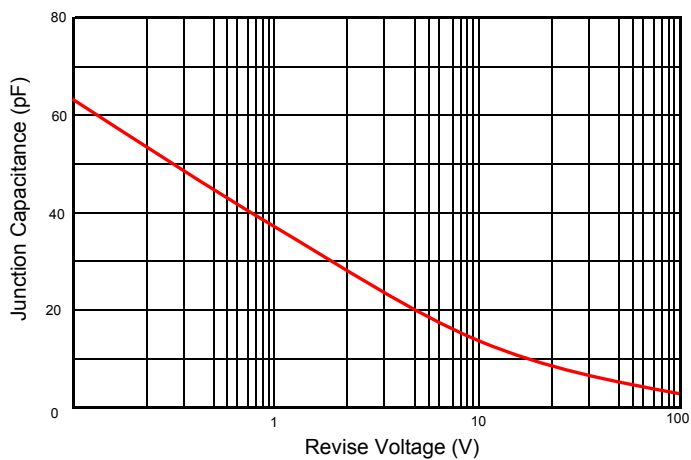
Typical Forward Current Derating Curve



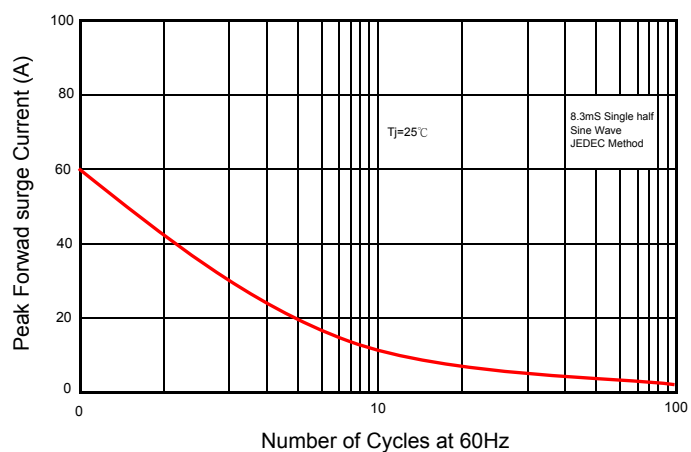
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

