Elektronische Bauelemente

SM1150B

VOLTAGE 150 V

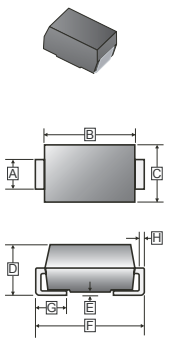
1.0 A Schottky Barrier Rectifiers

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 Revise Current

SMB (DO-214AA)



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

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

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 Working Peak Reverse Voltage Maximum DC Blocking Voltage		V_{RRM} V_{RWM} V_R	150	V
Average Forward Current @T_J=25°C		$I_{F(AV)}$	1	A
Peak Forward Current @ 8.3 ms Half Sine		I_{FSM}	30	A
Maximum Instantaneous Forward Voltage V_F @ I_{FM} = 1.0 A	@T_J = 25°C	V_F	0.85	V
	@T_J = 125°C		0.67	
Maximum Reverse Current At V_{RRM} Voltage (Note 3)	@ T_J = 25°C	I_R	0.1	mA
	@ T_J = 125°C		5	
Typical Junction Capacitance (Note 1)		C_J	65	pF
Typical Thermal Resistance Note 2)		$R\theta_{JL}$	25	°C/W
Voltage Rate of Chance (Rated V_R)		dv/dt	10000	V/μs
Operating Temperature Range		T_J	-50~150	°C
Storage temperature		T_{STG}	-65~150	°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

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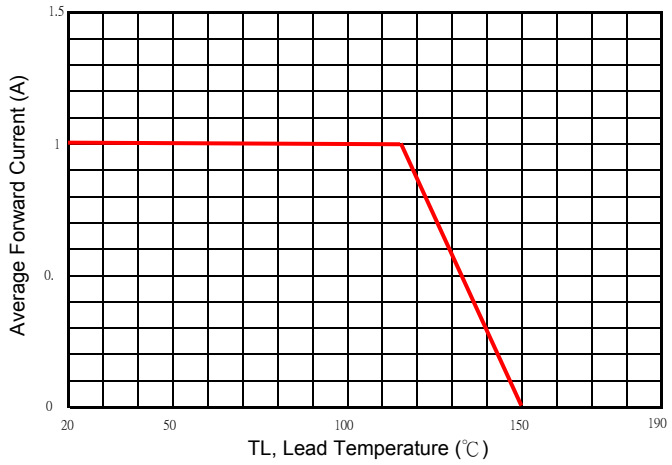
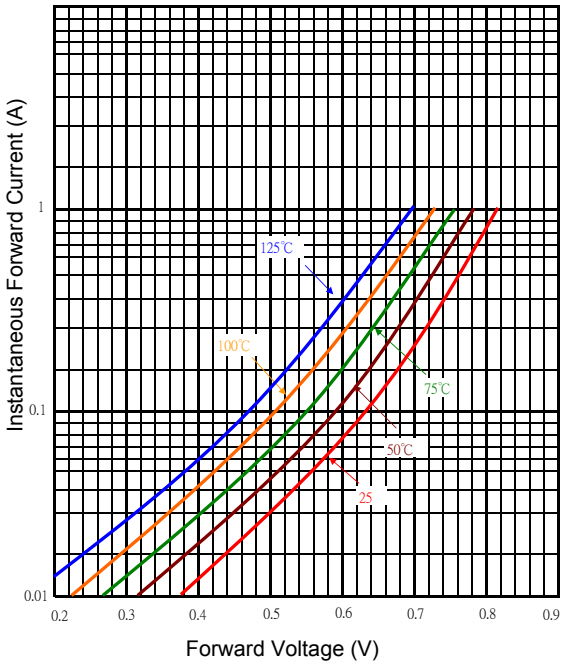
RATINGS AND CHARACTERISTIC CURVES

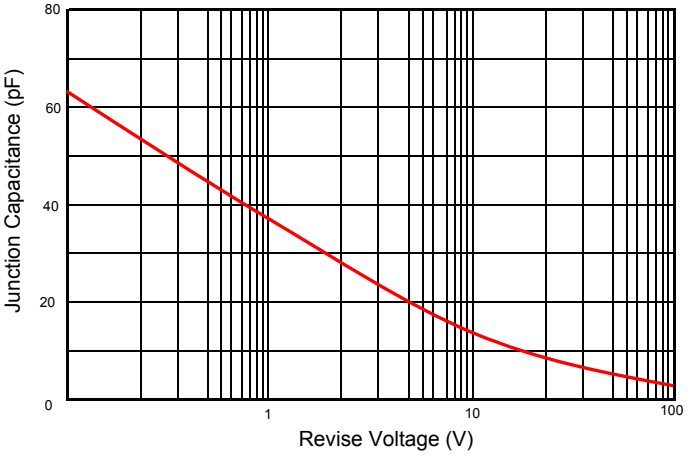
Typical Forward Current Derating Curve



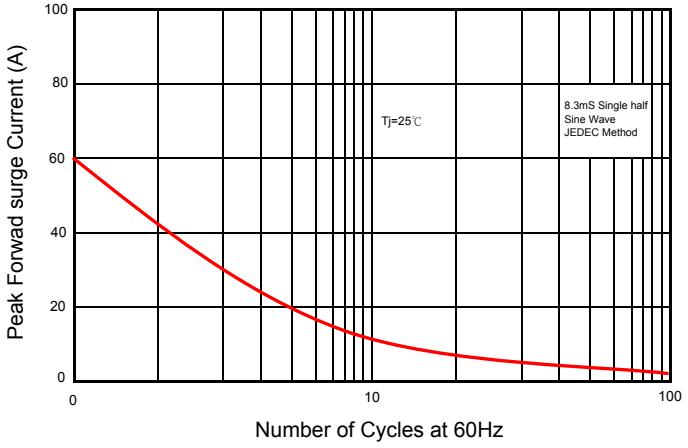
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic