Elektronische Bauelemente

SM5150A

Voltage 150V

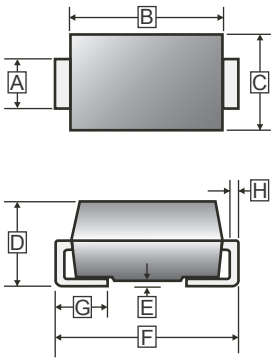
5.0 Amp Schottky Barrier Rectifiers

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

SMA



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.24	1.65	E	-	0.203
B	3.99	4.60	F	4.80	5.28
C	2.50	2.90	G	0.76	1.52
D	1.98	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

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

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, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Peak Repetitive Peak reverse voltage		V_{RRM}	150	V
Working Peak Reverse Voltage		V_{RWM}	150	V
Maximum DC Blocking Voltage		V_R	150	V
Average Forward Current @T_J=25°C		$I_{F(AV)}$	5	A
Peak Forward Current @ 8.3 ms Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	150	A
Maximum Instantaneous Forward Voltage	I_{FM}=5A, T_A=25°C	V_F	0.83	V
	I_{FM}=5A, T_A=75°C		0.73	
	I_{FM}=5A, T_A=125°C		0.65	
Maximum DC Reverse Current at Rated DC Blocking Voltage [3]	T_J=25°C	I_R	50	μA
	T_J=100°C		800	
Typical Junction Capacitance [1]		C_J	350	pF
Typical Thermal Resistance [2]		$R_{\theta JC}$	20	°C / W
Voltage Rate of Chance (Rated V_R)		dv / dt	1000	V / μs
Operating Storage Temperature		T_J, T_{STG}	-50~150, -65~175	°C

Notes:
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case
3. Pulse Test：Pulse Width≦300μs, Duty Cycle≦2.0%.

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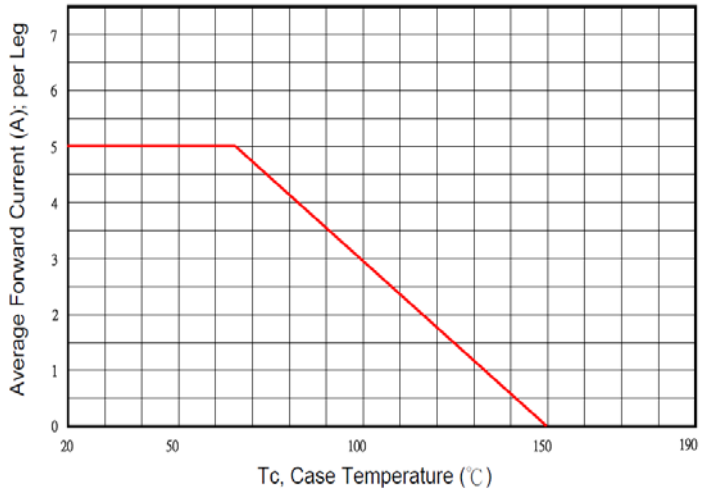
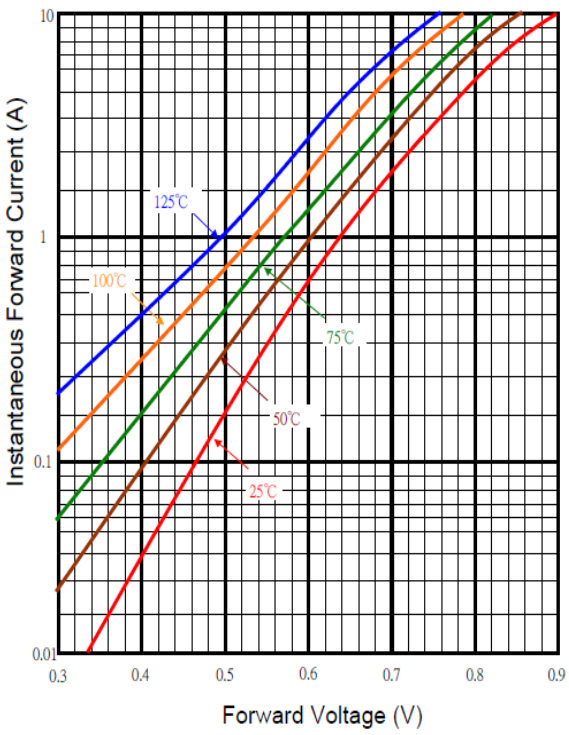
RATINGS AND CHARACTERISTIC CURVES

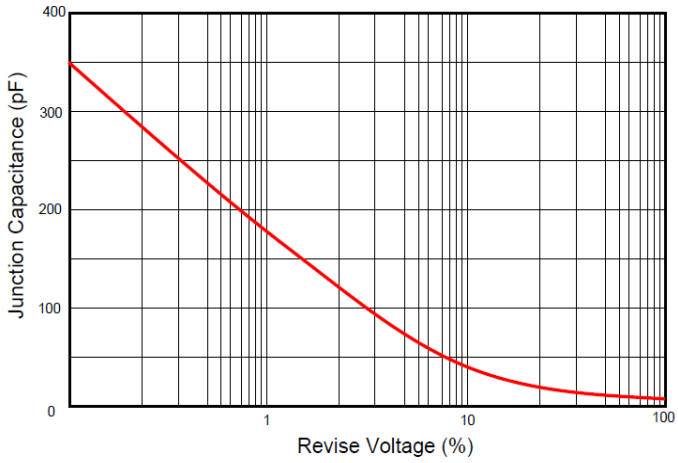
Typical Forward Current Derating Curve



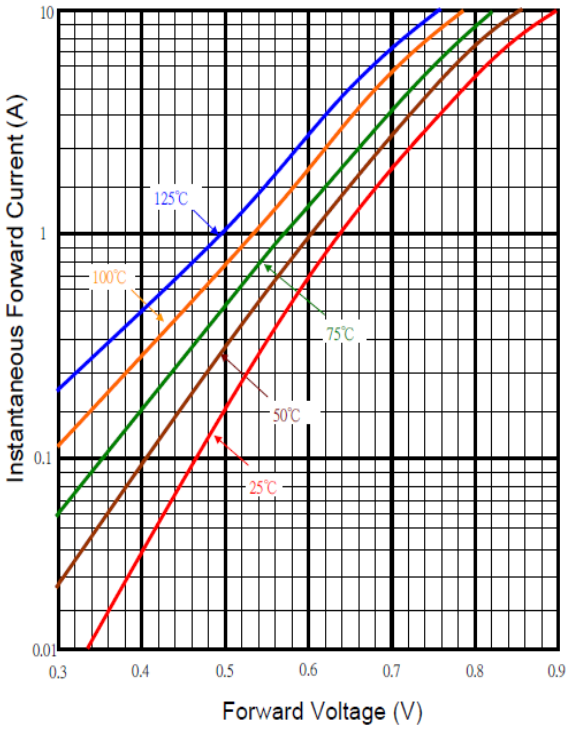
Typical Forward Characteristic



Typical Junction Capacitance



Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current