Elektronische Bauelemente

SM10150D

Voltage 150 V
10A Schottky Barrier Rectifiers

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

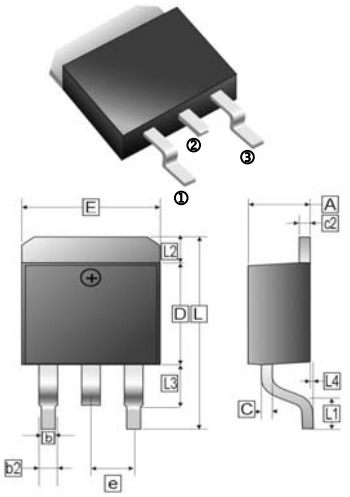
FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

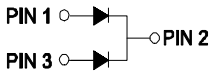
MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 2.24 grams

TO-263(D^2-PACK)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.85	c2	1.10	1.65
b	0.51	1.00	b2	1.34 REF	
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54 REF	
L3	1.50 REF		L	14.6	16.1
L1	2.5 REF		L2	1.27 REF	
E	9.60	10.67			



MAXIMUM RATINGS

(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
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	150	V
Maximum RMS Voltage		V_{RMS}	150	V
Maximum DC Blocking Voltage		V_{DC}	150	V
Maximum Average Forward Rectified Current	(per leg)	I_F	5	A
	(per device)		10	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	130	A
Maximum Instantaneous Forward Voltage @5A	T_A=25°C	V_F	0.86	V
	T_A=100°C		0.75	
Maximum Reverse Current at Rated VRRM Per Diode [2]	T_A=25°C	I_R	0.1	mA
	T_A=100°C		8	
Typical Junction Capacitance [1]		C_J	350	pF
Voltage Rate Of Change		dv/dt	10000	V / μs
Typical Thermal Resistance [3]		$R_{\theta JC}$	6	°C / W
Operating & Storage Temperature		T_J ,T_{STG}	-55~150	°C

NOTES:
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Plus test: 300μS Pulse width, 1% duty cycle..
3. FR4 Board Heat sink size: 10*10*0.2mm.

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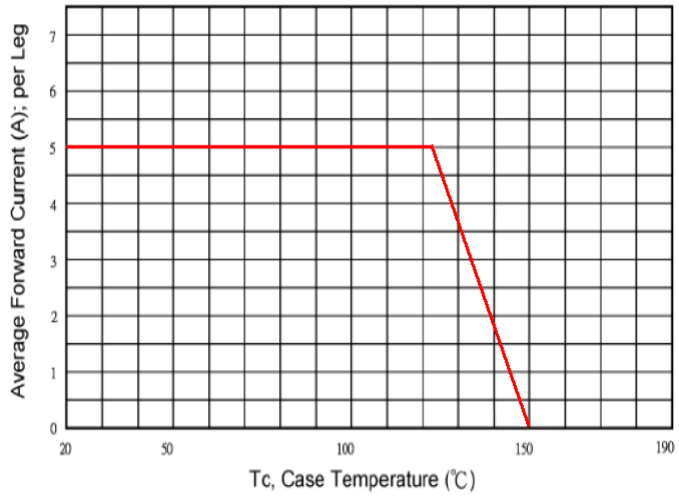
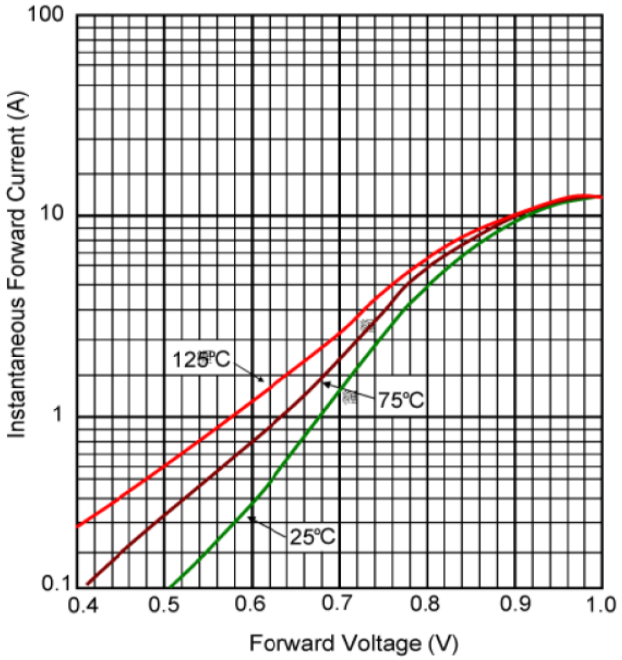
RATINGS AND CHARACTERISTIC CURVES

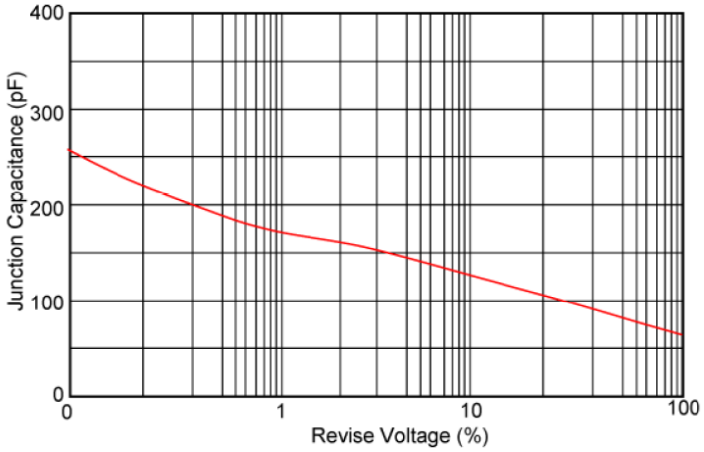
Typical Forward Current Derating Curve



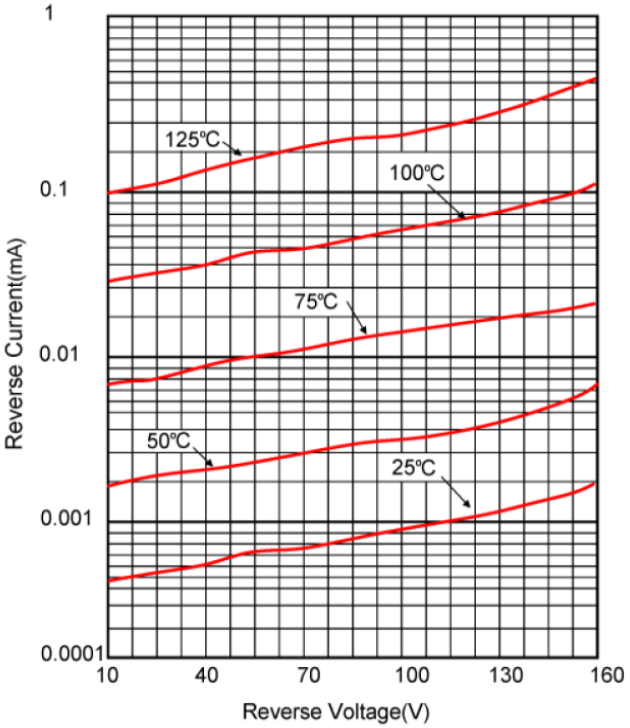
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current