Elektronische Bauelemente

SM5150D

VOLTAGE 150V

5.0AMP Surface Mount Schottky Barrier Rectifiers

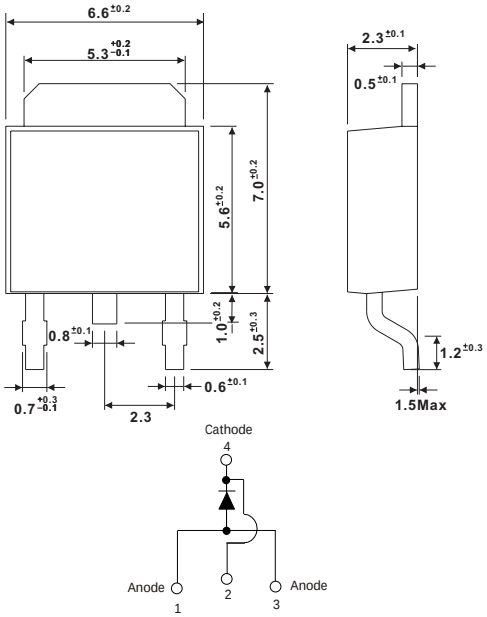
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

D-Pack

●FEATURES

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



Dimensions in millimeters

●MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL 94V-0 rate flame retardant
- . Metallurgically bonded construction
- . Polarity: Color band denotes cathode end
- . Mounting position: Any
- . Weight: 0.70 grams

●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	SM5150D	UNITS
Maximum Recurrent Peak Reverse Voltage	150	V
Working Peak Reverse Voltage	150	V
Maximum DC Blocking Voltage	150	V
Maximum Average Forward Rectified Current, See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 mS single half Sine-wave superimposed on rated load (JEDEC method)	125	A
Maximum Instantaneous Forward Voltage at 5.0A	0.83	V
Maximum DC Reverse Current Ta=25 ℃ At Rated DC Blocking Voltage Ta=100 ℃	0.1 7.5	mA
Typical Junction Capacitance (Note 1)	350	pF
Typical Thermal Resistance RθJC (Note 2)	10	℃ / W
Operating Temperature Range T_J	-50 ~ +150	℃
Storage Temperature Range T_{STG}	-65 ~ +175	℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

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● RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

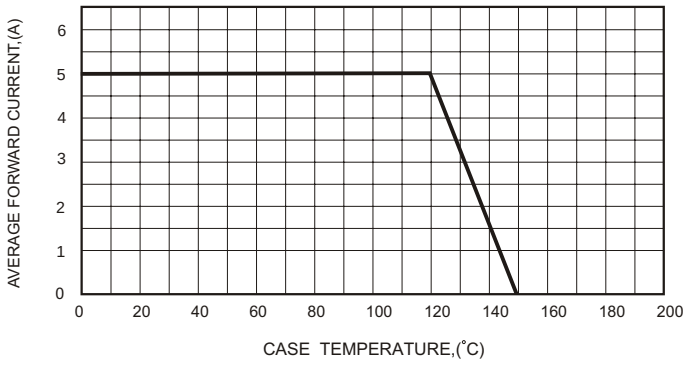

FIG.2-TYPICAL FORWARD CHARACTERISTICS

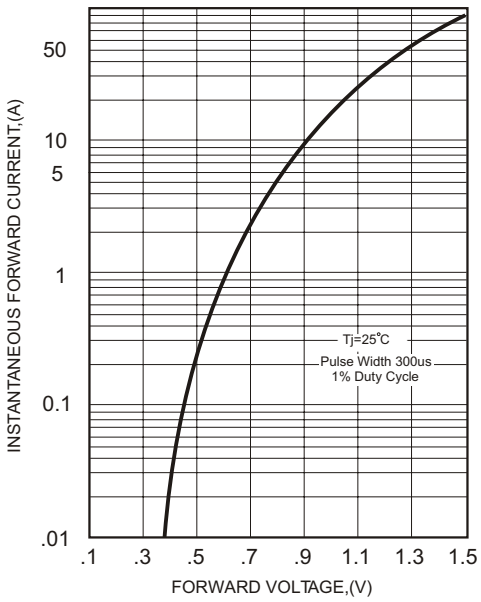

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

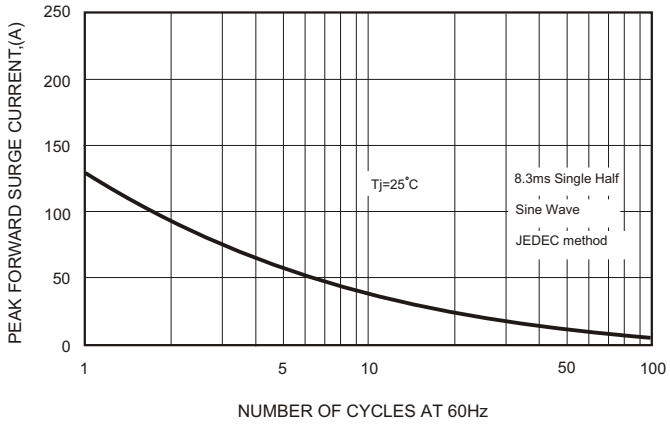

FIG.4-TYPICAL JUNCTION CAPACITANCE

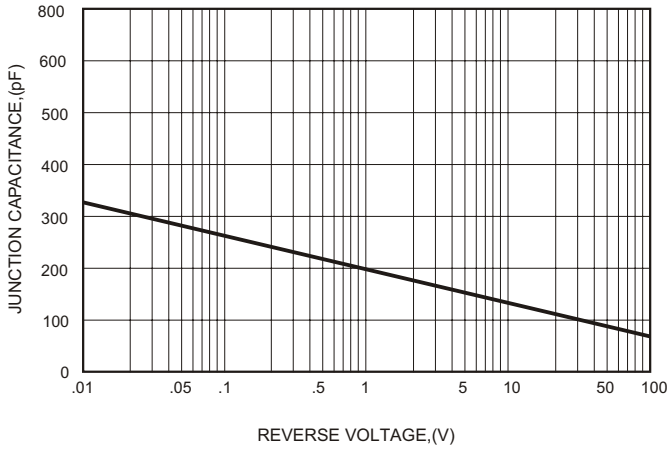

FIG.5 - TYPICAL REVERSE CHARACTERISTICS