Elektronische Bauelemente

SM820D THRU SM8100D

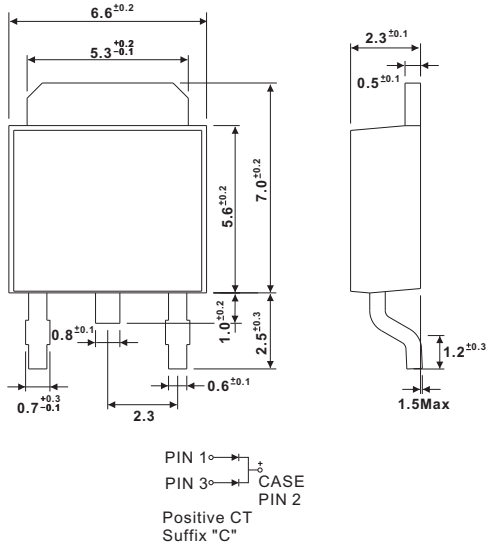
VOLTAGE 20V~ 100V

8.0 AMP Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product

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

D-Pack



Dimensions in millimeters

FEATURES

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

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

TYPE NUMBER	SM820D	SM840D	SM860D	SM8100D	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	100	V
Working Peak Reverse Voltage	20	40	60	100	V
Maximum DC Blocking Voltage	20	40	60	100	V
Maximum Average Forward Rectified Current, See Fig. 1	8.0 A				
Peak Forward Surge Current, 8.3 mS single half Sine-wave superimposed on rated load (JEDEC method)	80 A				
Maximum Instantaneous Forward Voltage at 4.0A	0.55		0.65	0.83	V
Maximum DC Reverse Current Ta=25 ℃ At Rated DC Blocking Voltage Ta=100 ℃	0.3 45		0.15 22.5	0.05 7.5	mA
Typical Junction Capacitance (Note 1)	250				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 (SM820D THRU SM8100D)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

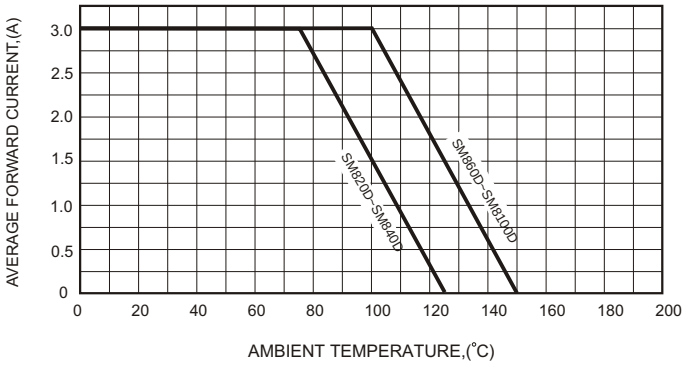

FIG.2-TYPICAL FORWARD CHARACTERISTICS

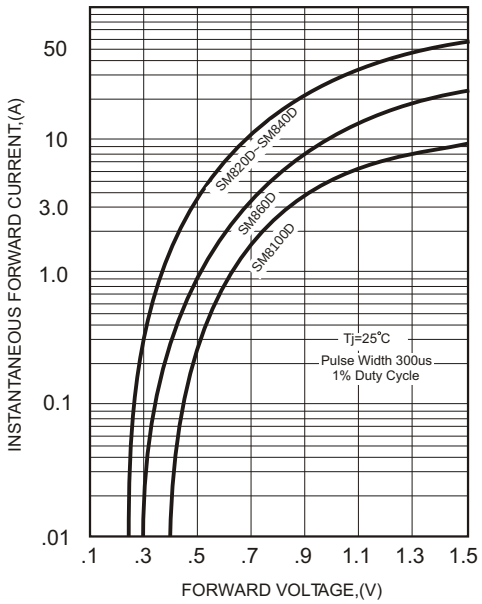

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

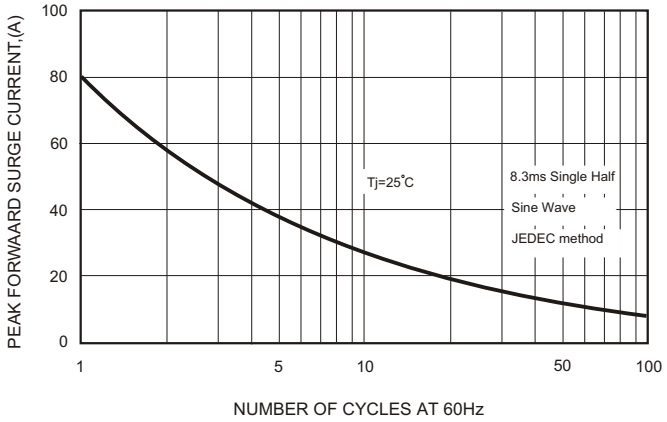

FIG.4-TYPICAL JUNCTION CAPACITANCE

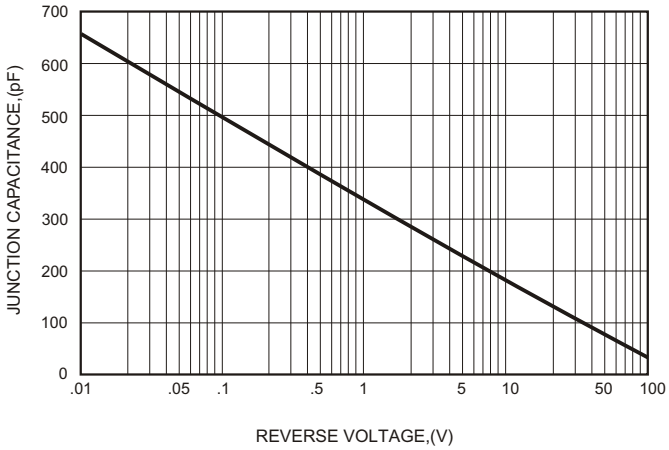

FIG.5 - TYPICAL REVERSE CHARACTERISTICS