

RoHS Compliant Product

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

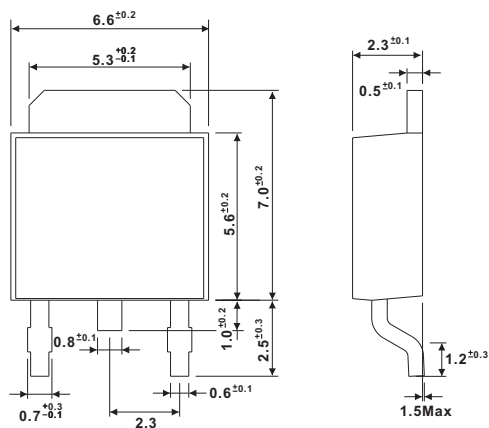
D-Pack

FEATURES

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

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



PIN 1
PIN 3
CASE
PIN 2
Positive CT
Suffix "-C"

Dimensions in millimeters

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	SM620D	SM640D	SM660D	SM6100D	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	6.0 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 3.0A	0.55		0.65	0.83	V
Maximum DC Reverse Current Ta=25 °C	0.2		0.1	0.05	mA
At Rated DC Blocking Voltage Ta=100 °C	30		15	7.5	
Typical Junction Capacitance (Note 1)	170				pF
Typical Thermal Resistance RθJA (Note 2)	120				/W
Typical Thermal Resistance RθJL (Note 2)	10				
Operating Temperature Range Tj	-50 ~ +150				
Storage Temperature Range Tstg	-65 ~ +175				

NOTES:

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

● **RATING AND CHARACTERISTIC CURVES (SM620D THRU SM6100D)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

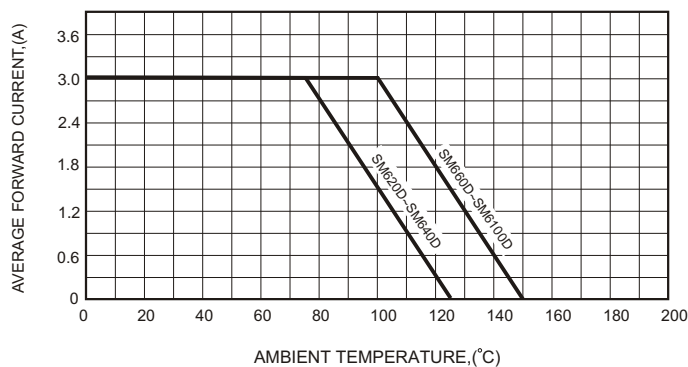


FIG.2-TYPICAL FORWARD CHARACTERISTICS

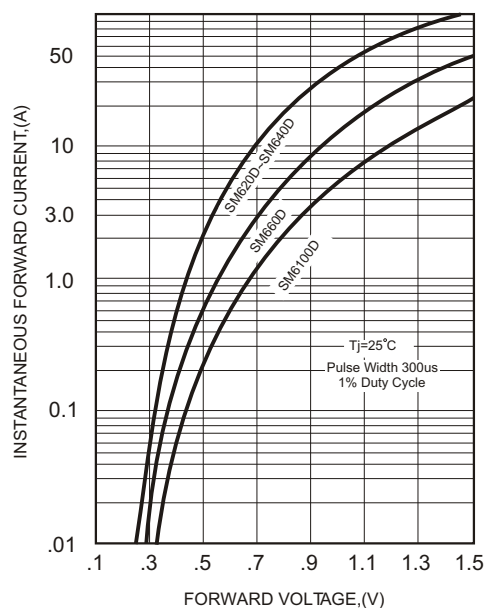


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

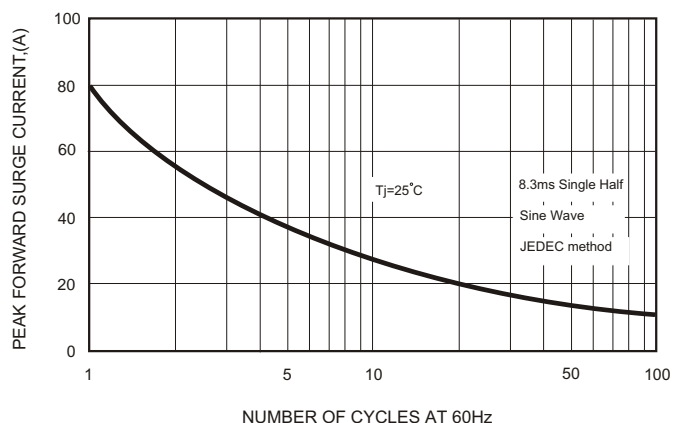


FIG.4-TYPICAL JUNCTION CAPACITANCE

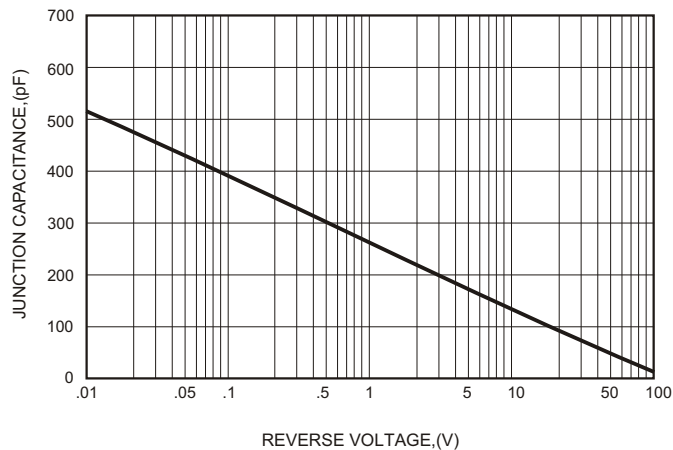


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

