

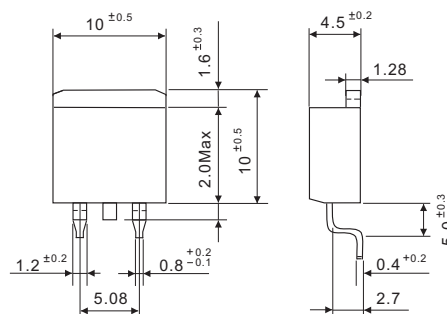
RoHS Compliant Product

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

D²-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: 1.60 grams



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	SM1620D	SM1640D	SM1660D	SM16100D	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	16.0 A				
Peak Forward Surge Current, 8.3 ms single half Sine-wave superimposed on rated load (JEDEC method)	150 A				
Maximum Instantaneous Forward Voltage at 8.0A	0.55		0.65	0.83	V
Maximum DC Reverse Current Ta=25 °C	0.3		0.15	0.05	mA
At Rated DC Blocking Voltage Ta=100 °C	45		22.5	7.5	mA
Typical Junction Capacitance (Note 1)	700		460	280	pF
Typical Thermal Resistance RθJC (Note 2)	3.0				/ 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"²(12.7mm)².

● **RATING AND CHARACTERISTIC CURVES (SM1620D THRU SM16100D)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

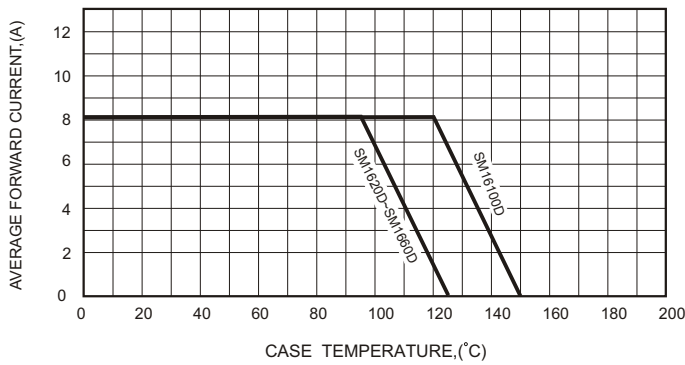


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

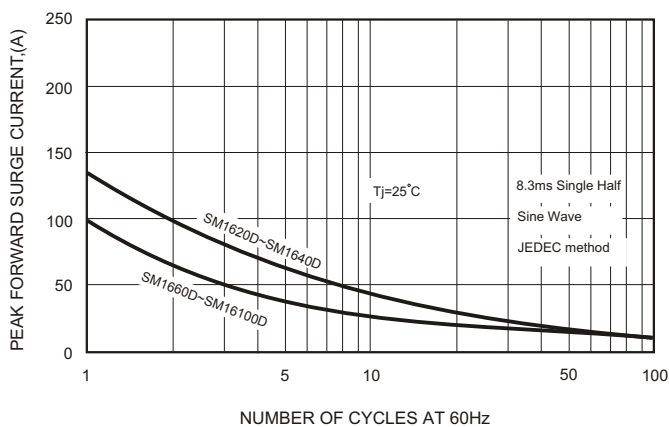


FIG.4-TYPICAL JUNCTION CAPACITANCE

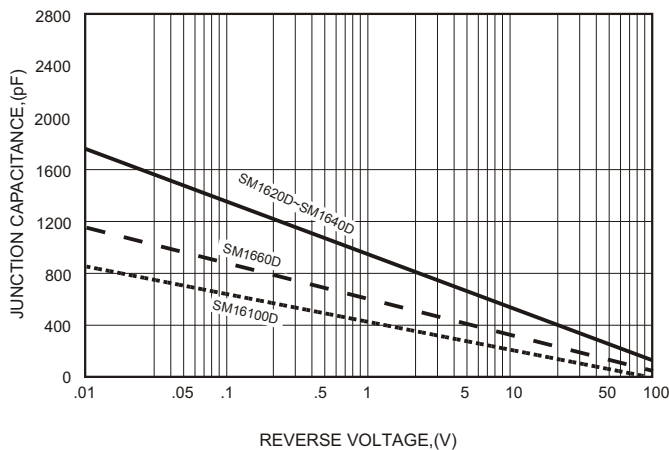


FIG.2-TYPICAL FORWARD CHARACTERISTICS

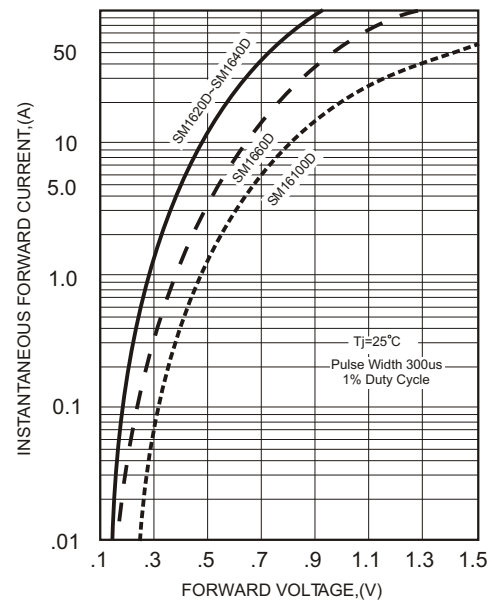


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

