

RoHS Compliant Product

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

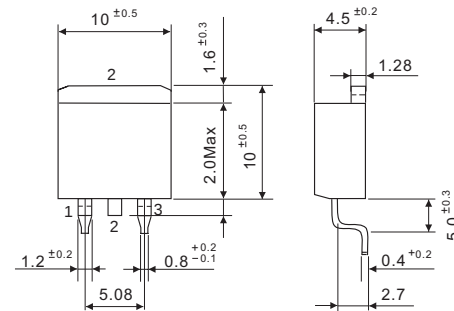
D²-Pack

●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



1 → 2 → 3 Common Cathode

Dimensions in millimeters

●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	SM3040D	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Working Peak Reverse Voltage	40	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current, See Fig. 1	30	A
Peak Forward Surge Current, 8.3 mS single half Sine-wave superimposed on rated load (JEDEC method)	250	A
Maximum Instantaneous Forward Voltage at 15A	0.60	V
Maximum DC Reverse Current Ta=25	1.0	mA
At Rated DC Blocking Voltage Ta=100	10	
Typical Junction Capacitance (Note 1)	600	pF
Typical Thermal Resistance RθJC (Note 2)	3	/ 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.

● **RATING AND CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

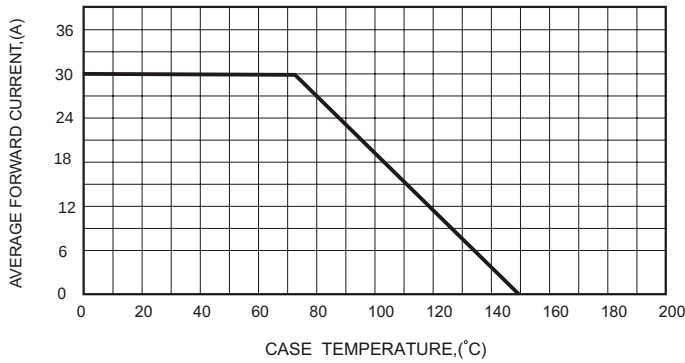


FIG.2-TYPICAL FORWARD CHARACTERISTICS

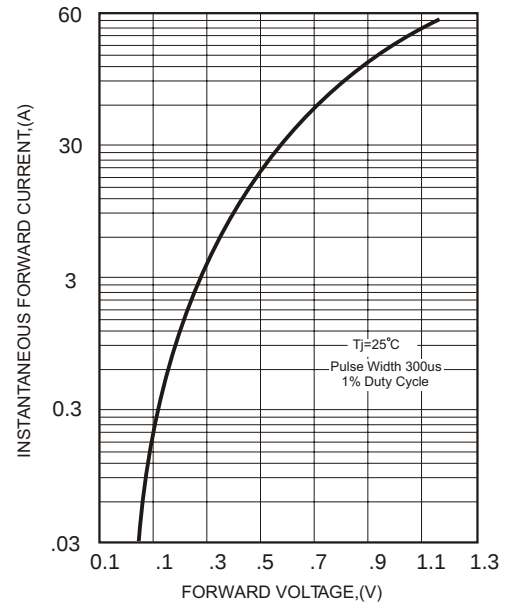


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

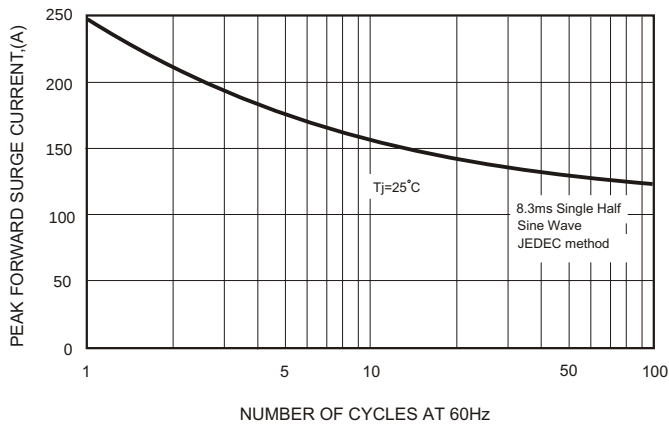


FIG.4-TYPICAL JUNCTION CAPACITANCE

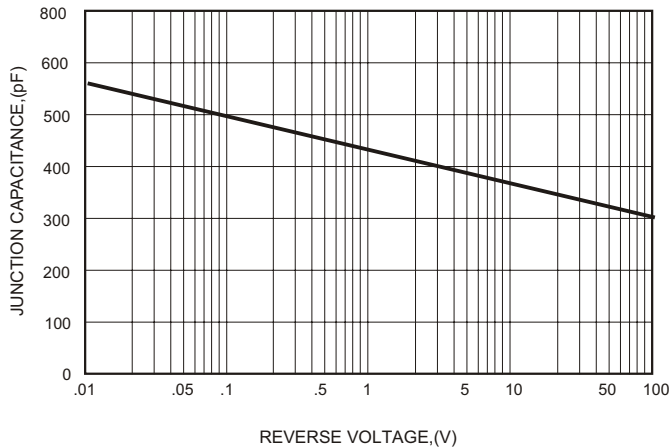


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

