Elektronische Bauelemente

SM620D~SM6100D

Voltage 20 ~100V

6.0Amp. Schottky Barrier Rectifiers

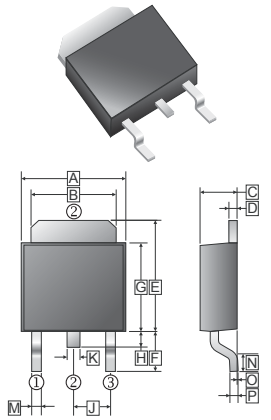
RoHS Compliant Product

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

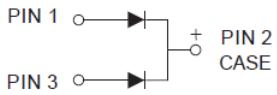
FEATURES

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

TO-252 (D-Pack)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.90	J	2.30 REF.	
B	4.95	5.50	K	0.64	1.14
C	2.10	2.50	M	0.50	1.14
D	0.43	0.9	N	1.3	1.8
E	6.0	7.5	O	0	0.13
F	2.80 REF		P	0.58REF.	
G	5.40	6.40			
H	0.60	1.20			



MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208
- Polarity: As Marked
- Mounting position: Any
- Weight: 0.7 grams

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

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, de-rate current by 20%.)

Parameter		Symbol	Part Number				Unit
			SM620D	SM640D	SM660D	SM6100D	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	60	100	V
Working Peak Reverse Voltage		V_{RSM}	20	40	60	100	V
Maximum DC Blocking Voltage		V_{DC}	20	40	60	100	V
Maximum Average Forward Rectified Current		I_F	6				A
Peak Forward Surge Current, @8.3ms single half sine-wave superimposed on rated load		I_{FSM}	80				A
Maximum Instantaneous Forward Voltage @3A		V_F	0.55		0.65	0.83	V
Maximum DC Reverse Current at Rated DC Blocking Voltage [3]	T_A=25°C	I_R	0.2		0.1	0.05	mA
	T_A=100°C		30		15	7.5	
Typical Junction Capacitance [1]		C_J	170				pF
Typical Thermal Resistance [2]		$R_{\theta Jc}$	10				°C/W
Operating Temperature		T_J ,	-55~150				°C
Storage Temperature		T_{STG}	-65~175				°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case. FR4 Board Heat sink size: 10*10*0.2mm.
3. Pulse test: 300us pulse width, 1% duty cycle

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

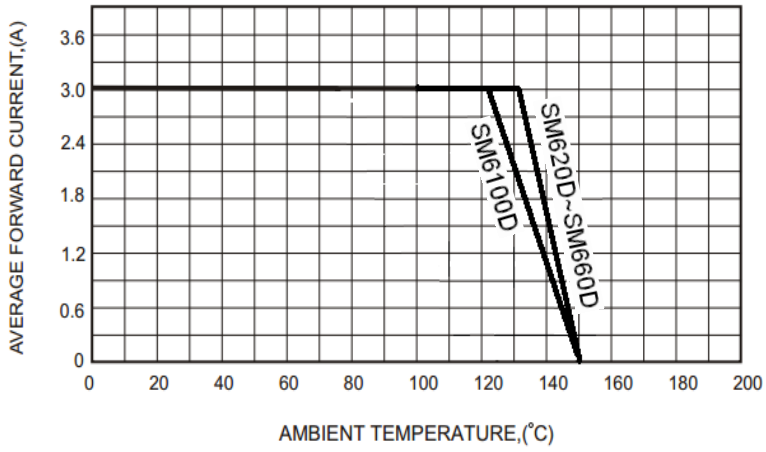


FIG.2-TYPICAL FORWARD CHARACTERISTICS

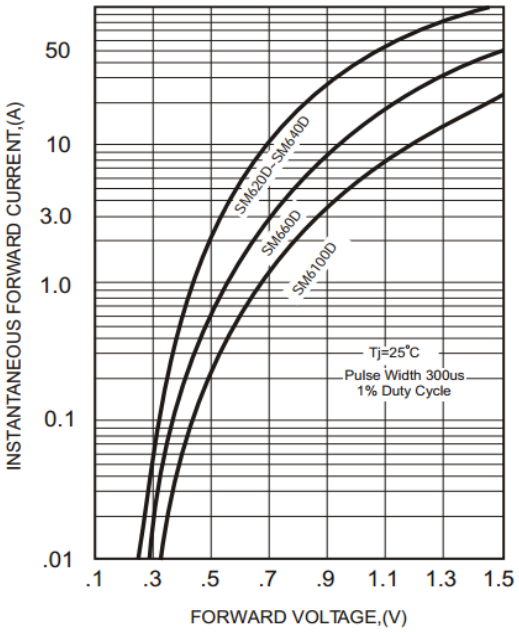


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

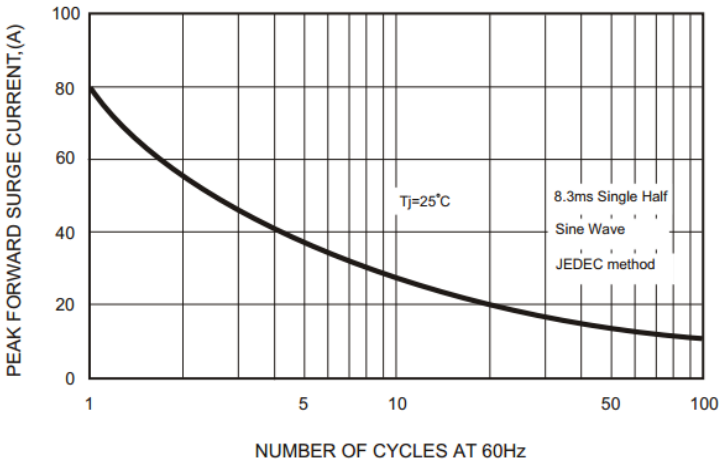


FIG.4-TYPICAL JUNCTION CAPACITANCE

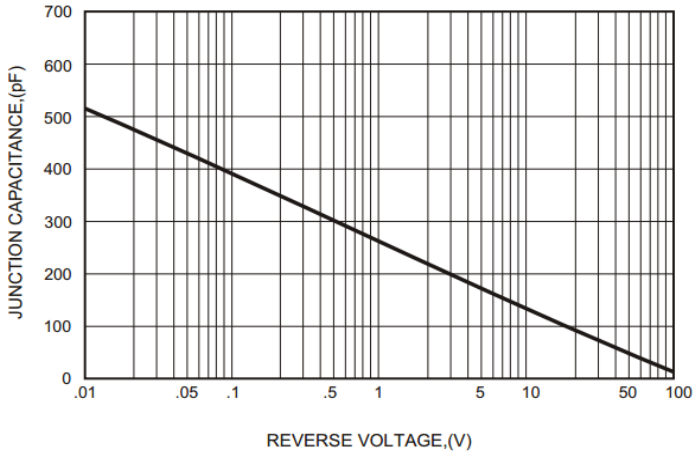


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

