Elektronische Bauelemente

SM10200D1

Voltage 200 V

10.0 Amp Schottky Barrier Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

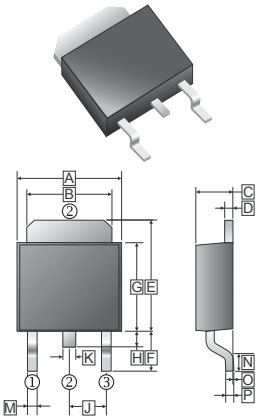
FEATURES

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

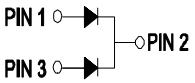
MECHANICAL DATA

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

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			



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	Rating	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RSM}	200	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Current	Per Leg	I_F	5	A
	Per Device		10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	120	A
Maximum Instantaneous Forward Voltage @ 5A		V_F	0.92	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	0.02	mA
	T_A=125°C		10	
Typical Junction Capacitance [1]		C_J	350	pF
Typical Thermal Resistance [2]		$R_{\theta JC}$	10	°C / W
Operating Temperature		T_J	-55~150	°C
Storage Temperature		T_{STG}	-55~175	°C

Notes:
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case. FR4 Board Heat sink size: 10*10*0.2mm.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

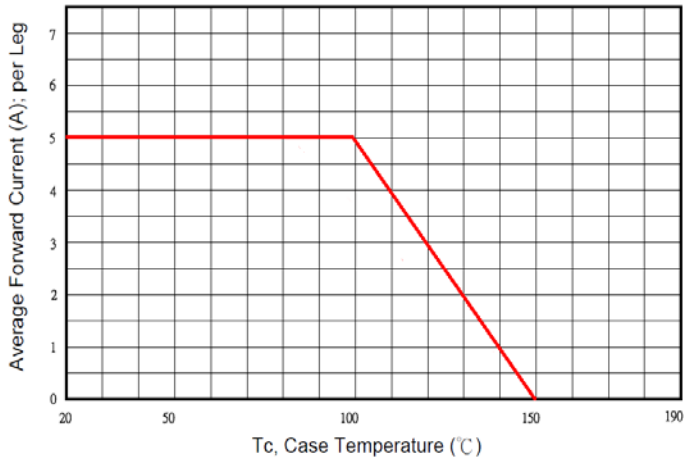

FIG.2- TYPICAL FORWARD VOLTAGE (PER LEG)

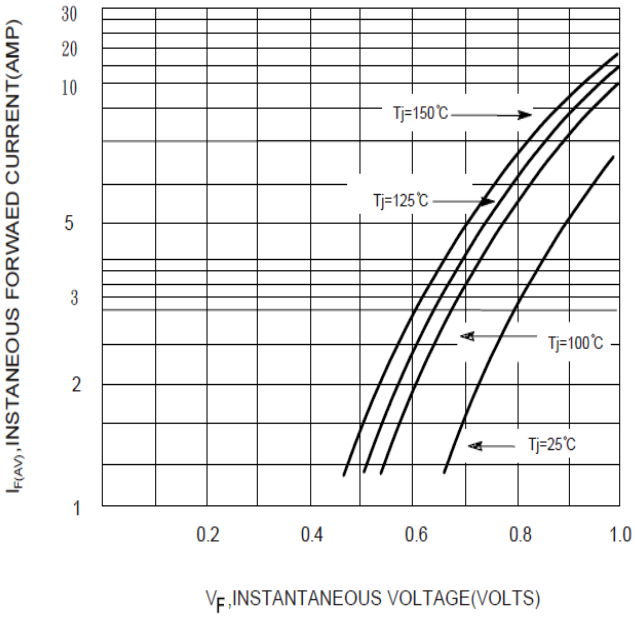

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

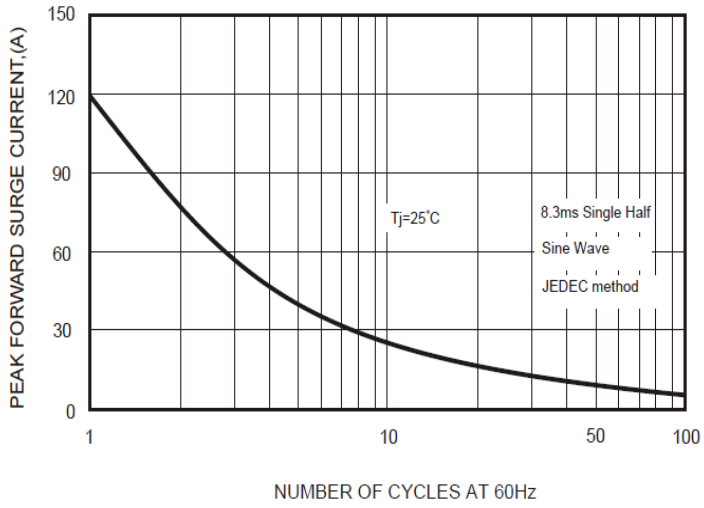

FIG.4-TYPICAL JUNCTION CAPACITANCE

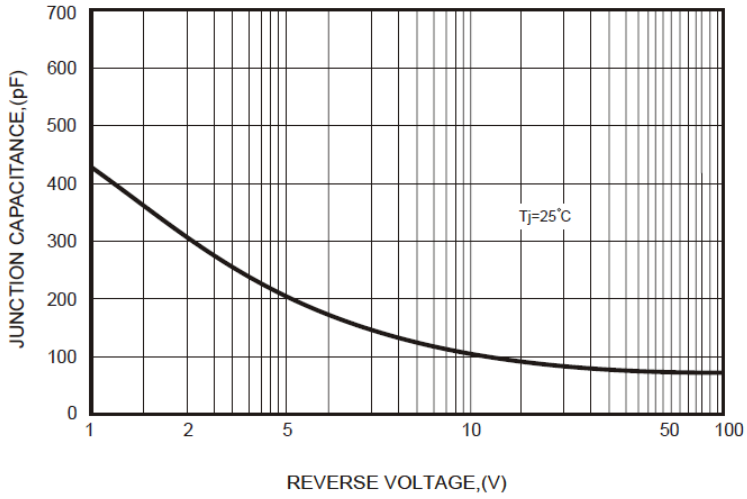

FIG.5-TYPICAL REVERSE CURRENT(PER LEG)