SECOS
Elektronische Bauelemente

SMPD5200H
200 V 5.0 Amp
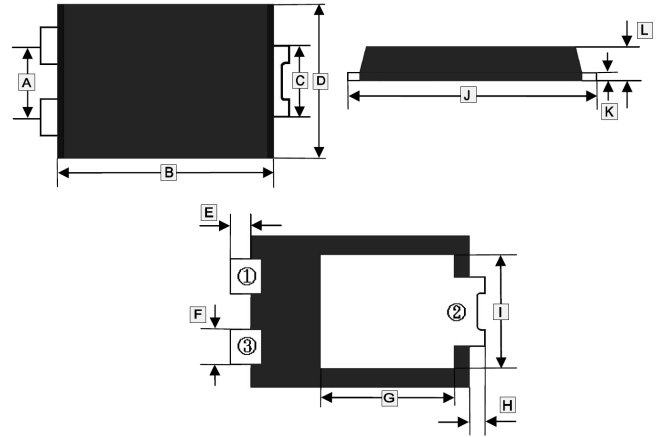### Low I_R Surface Mount Schottky Barrier Rectifiers

FEATURES

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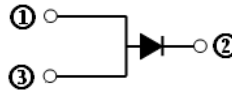- Epitaxial construction
- High operating temperature

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-277D	5K	13 inch

TO-277D

REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	1.65	1.95	G	3.25	3.85
B	5.3	5.5	H	0.45	0.65
C	1.7	1.9	I	2.9	3.2
D	3.8	4.2	J	6.4	6.6
E	0.45	0.65	K	0.3	0.45
F	0.8	1.0	L	1.0	1.2

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 Recurrent 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	I_F	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	I_{FSM}	110	A
Voltage Rate of Chance (Rated V_R)	dv/dt	10000	V / μs
Typical Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	80	°C / W
Typical Thermal Resistance from Junction to Lead	$R_{\theta JL}$	15	°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~175	°C

ELECTRICAL CHARACTERISTICS

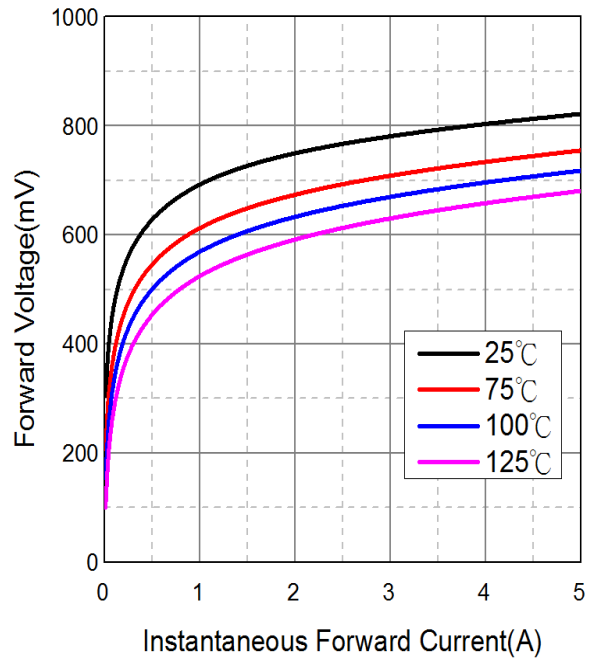| Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Instantaneous Forward Voltage	V_F	0.82	0.87	V	I_F=5A, T_J=25°C
		0.67	-		I_F=5A, T_J=125°C
Maximum DC Reverse Current at Rated DC Blocking Voltage [2]	I_R	0.5	50	uA	T_J=25°C
		50	700		T_J=125°C
Typical Junction Capacitance [1]	C_J	68	-	pF	

Notes:
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test：Pulse Width = 300 μs, Duty Cycle ≦ 2.0%.
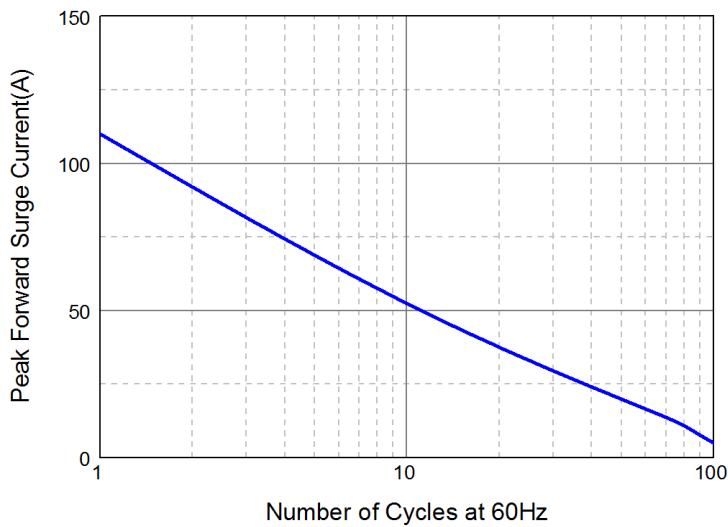
RATINGS AND CHARACTERISTIC CURVES

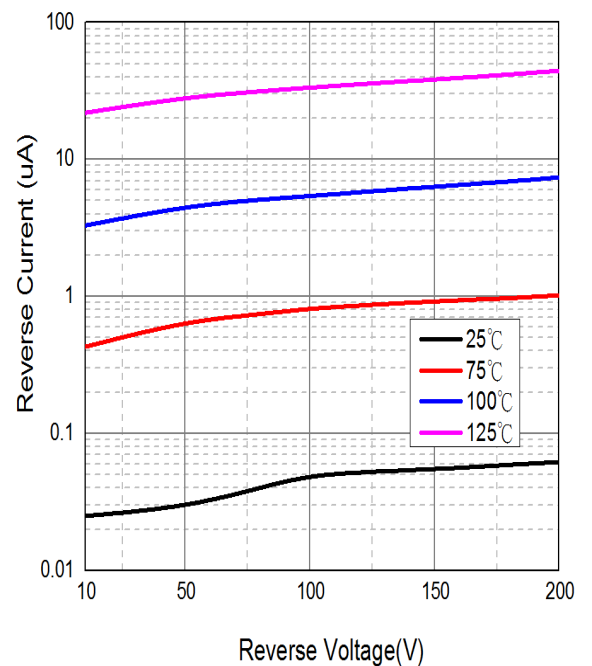Typical Forward Current Derating Curve

Typical Forward Characteristic

Maximum Non-Repetitive Forward Surge Current

Typical Junction Capacitance

Typical Reverse Characteristic