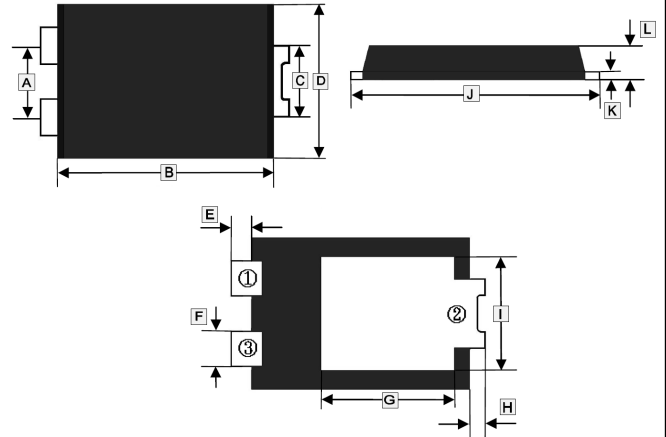


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

### FEATURES

- Schottky Barrier chip
- High thermal reliability
- Patented Super Barrier Rectifier Technology
- High forward surge capability
- Ultra low power loss and high efficiency
- Excellent high temperature stability
- Plastic material-UL flammability 94V-0

### TO-277D

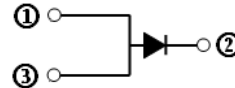


### PACKAGE INFORMATION

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

### PACKAGE INFORMATION

Part Number	Type
SMPD1060L-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	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

(T<sub>A</sub>=25°C, 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 Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum Working Peak Reverse Voltage	V <sub>RWM</sub>	60	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	60	V
Maximum RMS Rectified Voltage	V <sub>RMS</sub>	42	V
Maximum Average Rectified Output Current	I <sub>O</sub>	10	A
Non-Repetitive Peak Forward Surge Current@ 8.3 ms single half sine-wave, superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150	A
I <sup>2</sup> t Rating for Fusing@ t<8.3ms	I <sup>2</sup> t	259.375	A <sup>2</sup> S
Typical Thermal Resistance from Junction to Case <sup>1</sup>	R <sub>θJC</sub>	7	°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

### ELECTRICAL CHARACTERISTICS

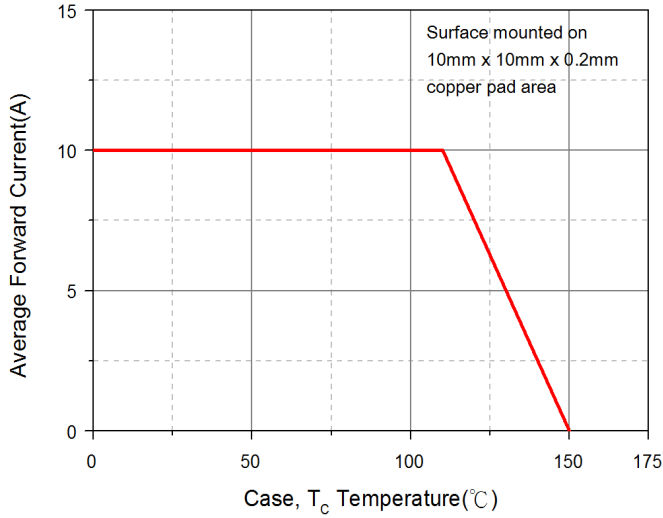
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage	V <sub>F</sub>	0.37	-	V	I <sub>F</sub> =3A, T <sub>A</sub> =25°C
		0.53	0.57		I <sub>F</sub> =10A, T <sub>A</sub> =25°C
		0.52	-		I <sub>F</sub> =10A, T <sub>A</sub> =100°C
Peak Reverse Current at Rated DC Blocking Voltage <sup>2</sup>	I <sub>R</sub>	-	0.3	mA	T <sub>A</sub> =25°C
		-	15		T <sub>A</sub> =100°C
Typical Junction Capacitance <sup>3</sup>	C <sub>J</sub>	390	-	pF	

Notes:

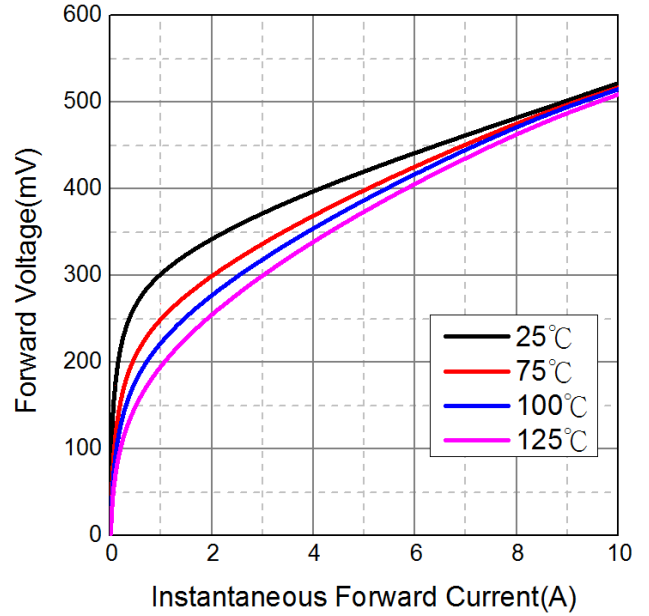
1. Surface mounted on 10mm\*10mm\*0.2mm copper pad area.
2. Pulse Test: Pulse Width=300µs, Duty Cycle≤2.0%.
3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**CHARACTERISTIC CURVES**

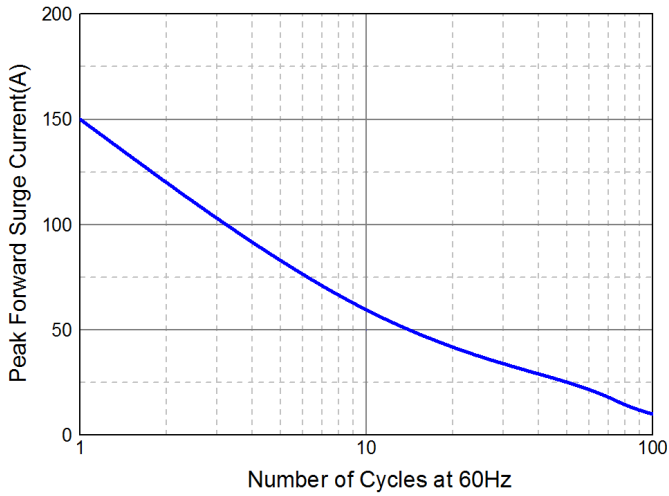
Typical Forward Current Derating Curve



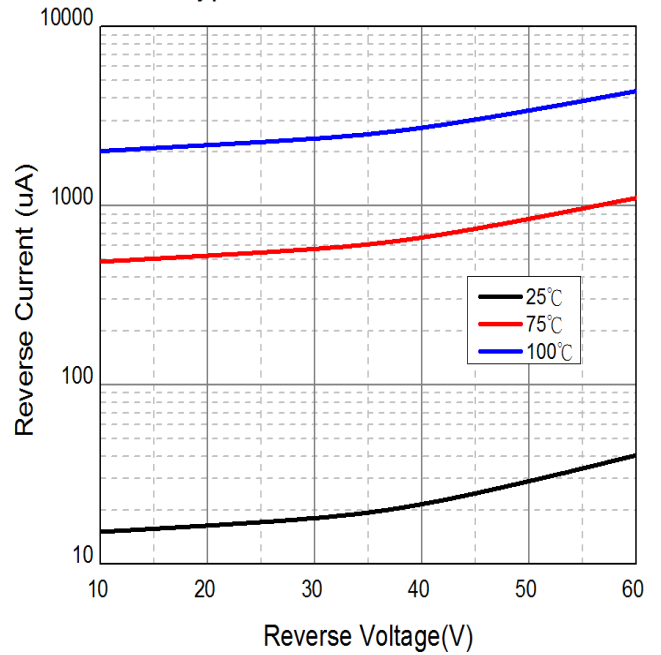
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

