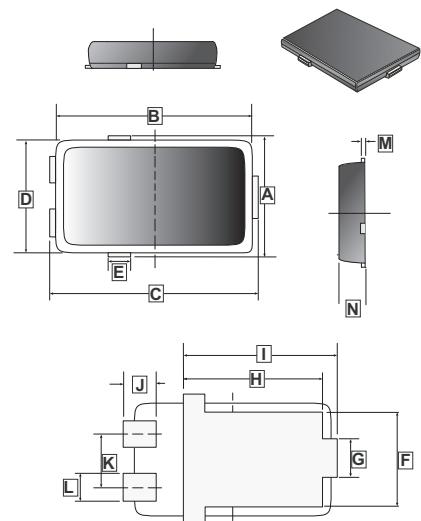


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

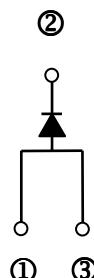
- Low leakage
- Low forward voltage drop
- Super long operating life
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

TO-277A



## PACKAGE INFORMATION

Package	MPQ	LeaderSize
TO-277A	4K	13' inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.8	H	4.05 Typ.	
B	5.9	6.3	J	4.4	4.8
C	6.3	6.7	K	2.0	2.2
D	4.1	4.5	L	1.0	1.4
E	0.65 Typ.		M	0.15	0.35
F	3.55	3.95	N	1.0	1.4
G	1.85	2.25			

## 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, derate current by 20%.

Parameters	Symbol	Part numbers			Units	Testing conditions	
		SMP1240	SMP1260	SMP12100			
Maximum Repetitive peak Reverse Voltage	$V_{RRM}$	40	60	100	V		
Maximum DC Blocking Voltage	$V_{DC}$	40	60	100	V		
Maximum Forward Voltage	$V_F$	0.55	0.7	0.85	V	$I_F=6A, T_A=25^\circ C$	
		0.5	0.65	0.8	V	$I_F=3A, T_A=125^\circ C$	
		0.38	0.58	0.68			
Maximum Average Forward Rectified Current	$I_{F(AV)}$	12			A	$T_L = 90^\circ C$	
Peak Forward Surge Current	$I_{FSM}$	300			A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_{R1}$	0.5			mA	$T_A=25^\circ C$	
	$I_{R2}$	1	0.5			$T_A=75^\circ C, 50\%V_{RRM,typ.}$	
	$I_{R3}$	50	30			$T_A=100^\circ C$	
Thermal Resistance junction to Ambient	$R_{\theta JA}$	100			K / W		
Thermal Resistance junction to Lead	$R_{\theta JL}$	3			K / W		
Operating Temperature Range	$T_J$	-55 ~ 150			°C		
In DC forward mode		200 (Note 1)				$\leq 1h$	
Storage Temperature Range	$T_{STG}$	-55 ~ 150			°C		

Notes :

1. Meets the requirements of IEC 61215 Ed.2 bypass diode thermal test.

Any changes of specification will not be informed individually.