

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

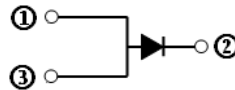
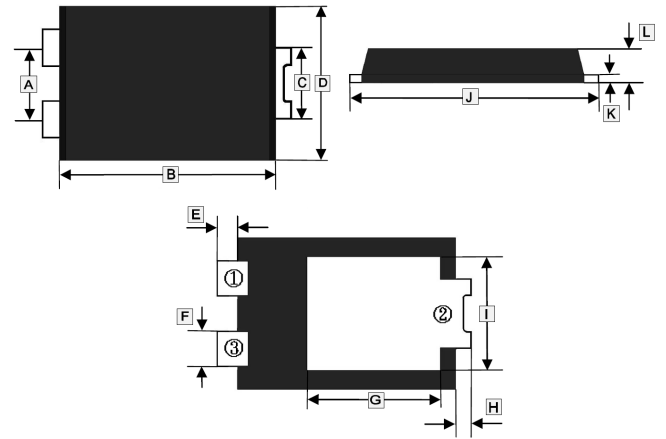
## FEATURES

- 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

## PACKAGE INFORMATION

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

### TO-277D



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

( $T_A=25^\circ\text{C}$ , 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	$V_{RRM}$	100	V
Maximum Working Peak Reverse Voltage	$V_{RWM}$	100	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum RMS Rectified Voltage	$V_{RMS}$	70	V
Maximum Average Rectified Output Current <sup>1</sup>	$I_O$	5	A
Non-Repetitive Peak Forward Surge Current@ 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC method) <sup>2</sup>	$I_{FSM}$	130	A
$I^2t$ Rating for Fusing@ $t < 8.3\text{ms}$	$I^2t$	70.135	$\text{A}^2\text{S}$
Typical Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	80	$^\circ\text{C} / \text{W}$
Typical Thermal Resistance from Junction to Lead	$R_{\theta JL}$	15	$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

Notes:

1. The data is tested on the condition that the ambient temperature is tested at a 9.5mm distance from the case.
2. FR-4 2oz 18.8mm × 14.4mm PCB with 5.6mm × 14.4mm copper pad.

## ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Forward Voltage Drop	$V_{FM}$	-	0.82	V	$I_F=5\text{A}, T_A=25^\circ\text{C}$
Peak Reverse Current at Rated DC Blocking Voltage	$I_R$	-	0.3	mA	$T_A=25^\circ\text{C}$
		-	15		$T_A=100^\circ\text{C}$

**CHARACTERISTIC CURVES**

Fig.1 - Forward Current Derating Curve

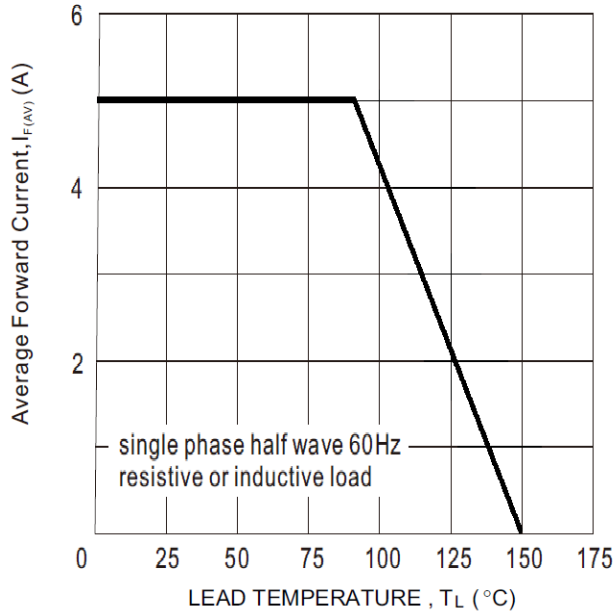


Fig2 : Instantaneous Forward Voltage

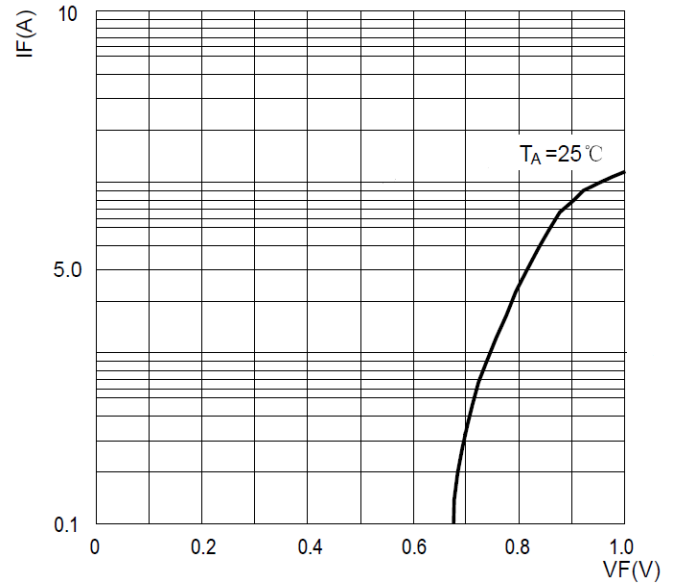


Fig3: Surge Forward Current Capacity

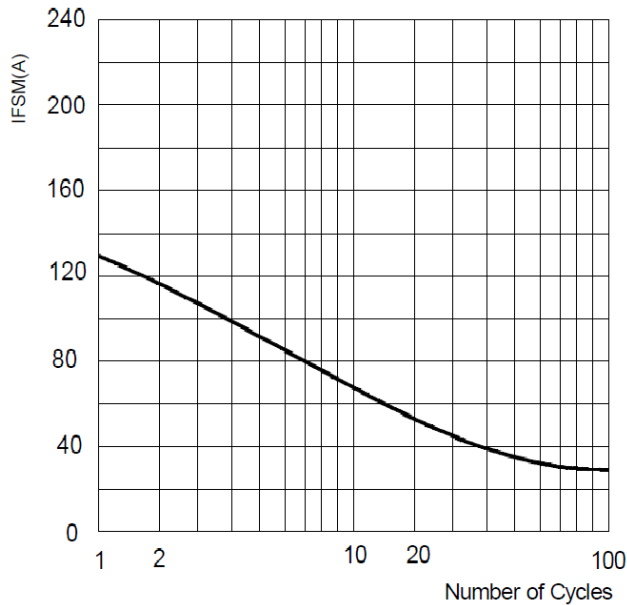


Fig4: Typical Reverse Characteristics

