

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

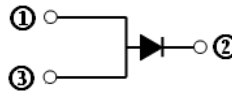
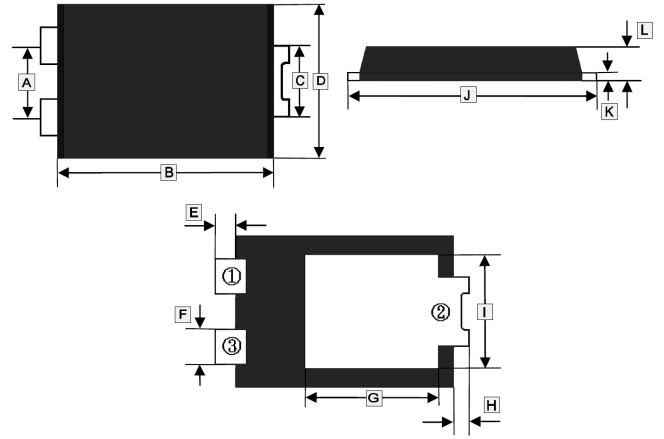
FEATURES

- 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°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 ¹	I _F	5	A
Non-Repetitive Peak Forward Surge Current@ 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC method) ²	I _{FSM}	150	A
I ² t Rating for Fusing@ t < 8.3ms	I ² t	93.375	A ² S
Typical Thermal Resistance from Junction to Ambient	R _{θJA}	80	°C / W
Typical Thermal Resistance from Junction to Lead	R _{θJL}	15	°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55~150	°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}	0.4	-	V	I _F =1A, T _A =25°C
		0.47	-		I _F =3A, T _A =25°C
		0.52	0.60		I _F =5A, T _A =25°C
Peak Reverse Current at Rated DC Blocking Voltage	I _R	-	0.3	mA	T _A =25°C
		-	15		T _A =100°C

CHARACTERISTIC CURVES

Fig.1 - Forward Current Derating Curve

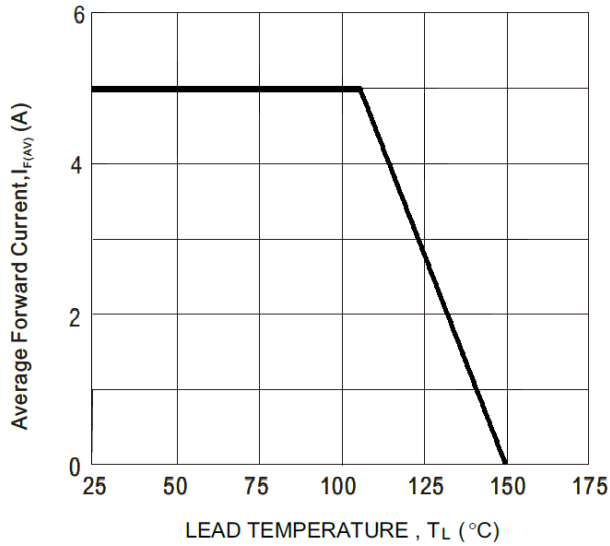


Fig. 2 Typical Forward Characteristics (per leg)

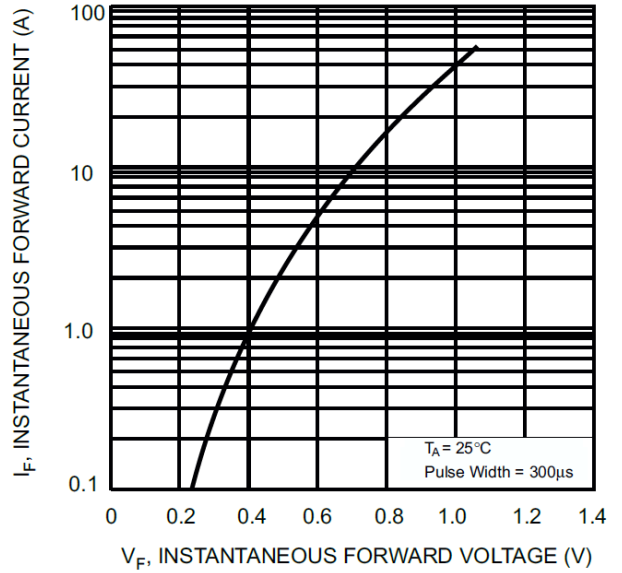


Fig. 3 Maximum Peak Forward Surge Current (per leg)

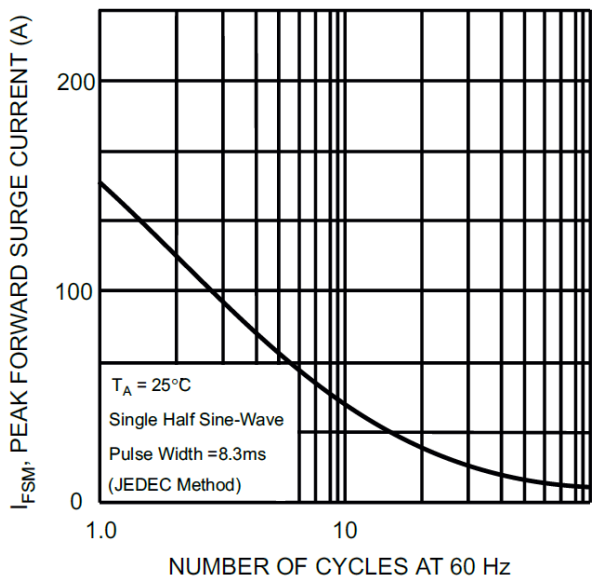


Fig4: Typical Reverse Characteristics

