

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

FEATURES

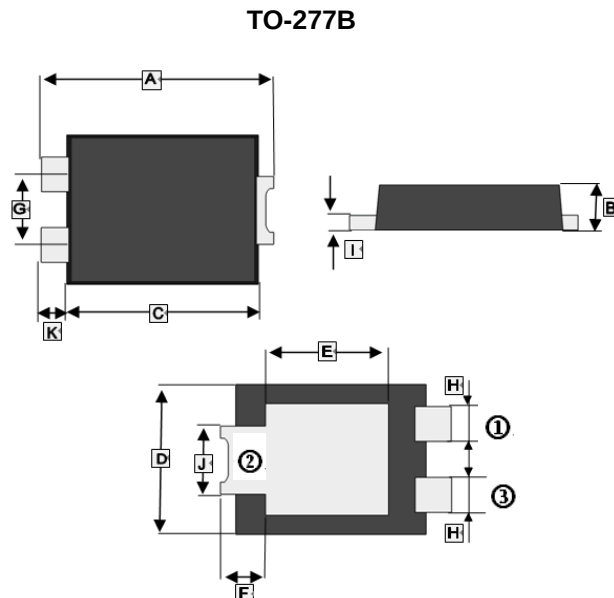
- Super long operating life
- Low forward voltage
- Low forward voltage drop
- Plastic package has Underwriters Laboratory Flammability Classification 94

MECHANICAL DATA

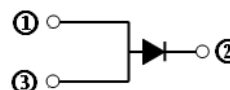
- Case: TO-277B molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: ANY

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-277B	3K	13 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.70	G	1.65	1.95
B	1.00	1.30	H	0.75	1.05
C	5.25	5.50	I	0.15	0.43
D	3.75	4.30	J	1.65	1.95
E	3.05	3.55	K	0.45	0.75
F	0.85	1.30			



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%.)

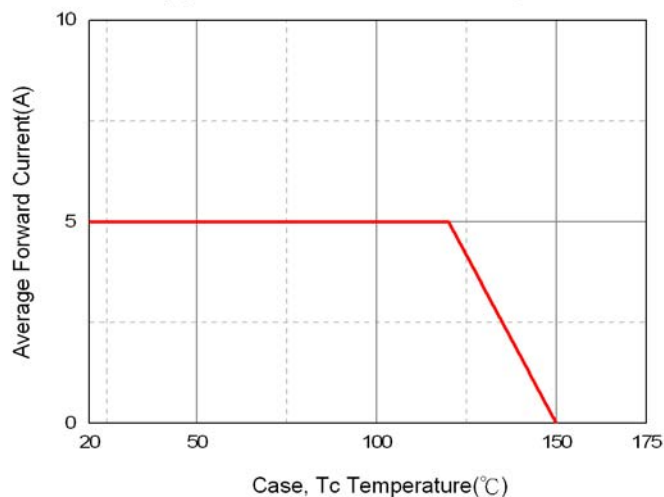
Parameters		Symbol	Rating	Units
Maximum Repetitive peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Forward Voltage @ $I_{FM}=5A$		V_F	0.81	V
Maximum Average Forward Rectified Current@ $T_L=90^\circ C$		$I_{F(AV)}$	5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	160	A
Maximum DC Reverse Current at Rated DC Blocking Voltage ³	$T_J=25^\circ C$	I_R	0.5	mA
	$T_J=100^\circ C$		20	
Typical Junction Capacitance ²		C_J	120	pF
Thermal Resistance Junction to Case ¹		$R_{\theta JC}$	7	$^\circ C / W$
Operating and Storage Temperature Range		T_J, T_{STG}	-55~150	$^\circ C$

Note:

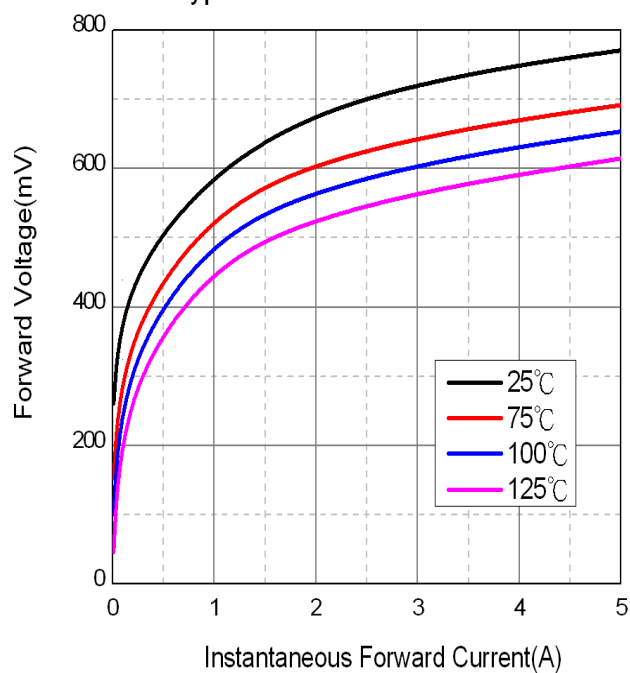
1. Thermal resistance from junction to Case. FR4 Board. Heat sink size: 10*10*0.2mm.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

CHARACTERISTIC CURVES

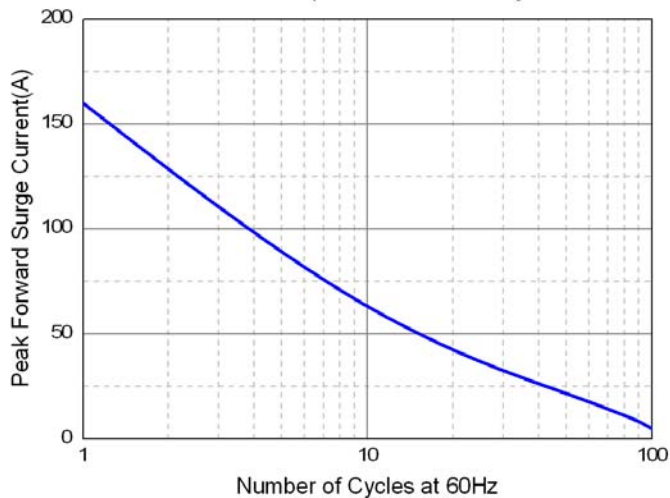
Typical Forward Current Derating Curve



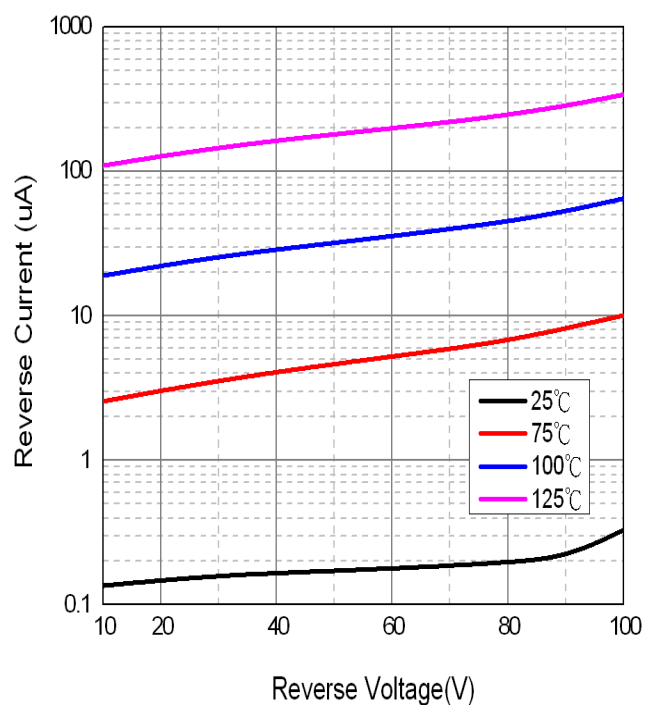
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

