

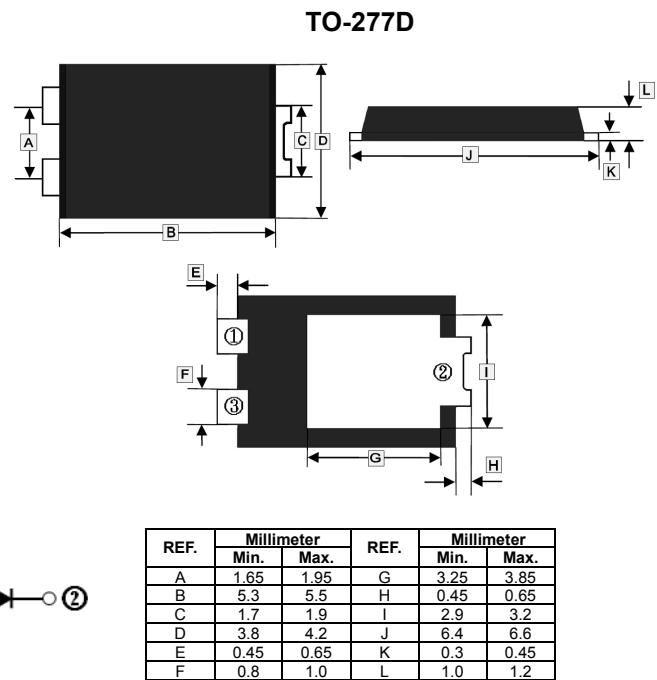
RoHS Compliant Product  
A suffix of "C" specifies halogen & lead-free

## 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



## 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%).

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Working Peak Reverse Voltage	$V_{RSM}$	200	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current	$I_F$	15	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	$I_{FSM}$	250	A
Voltage Rate of Change (Rated $V_R$ )	$dv/dt$	10000	V / $\mu$ s
Typical Thermal Resistance	$R_{\theta JA}$	80	$^{\circ}$ C /W
Typical Thermal Resistance	$R_{\theta JL}$	3.5	$^{\circ}$ C /W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-40~150	$^{\circ}$ C

## ELECTRICAL CHARACTERISTICS

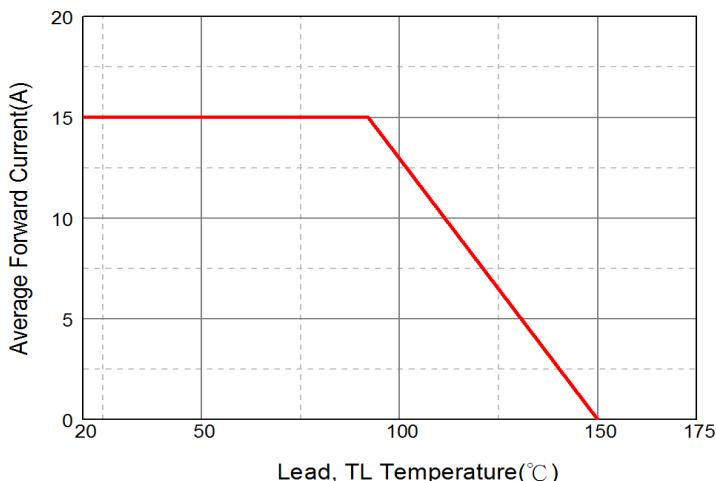
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_F$	0.67	-	V	$I_F = 3A, T_J = 25^{\circ}C$
		0.81	0.85		$I_F = 10A, T_J = 25^{\circ}C$
		0.9	1.1		$I_F = 15A, T_J = 25^{\circ}C$
		0.73	-		$I_F = 15 A, T_J = 125^{\circ}C$
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup>	$I_R$	-	0.2	mA	$T_J=25^{\circ}C$
		-	20		$T_J=100^{\circ}C$
Typical Junction Capacitance <sup>1</sup>	$C_J$	310	-	pF	

### NOTES:

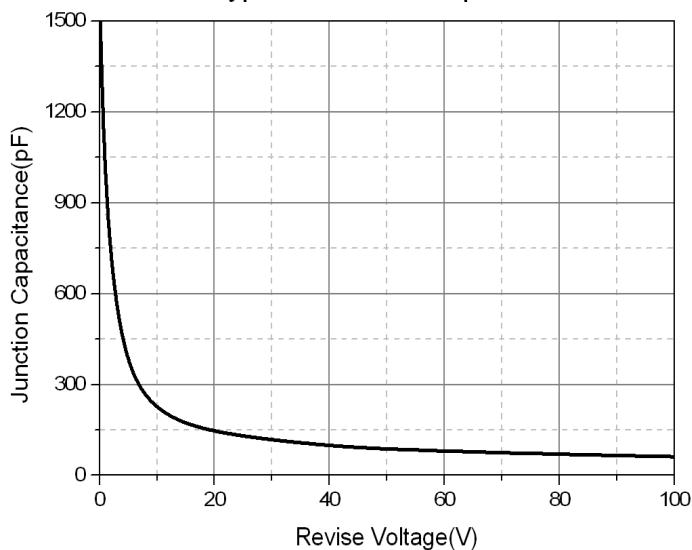
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

## RATINGS AND CHARACTERISTIC CURVES

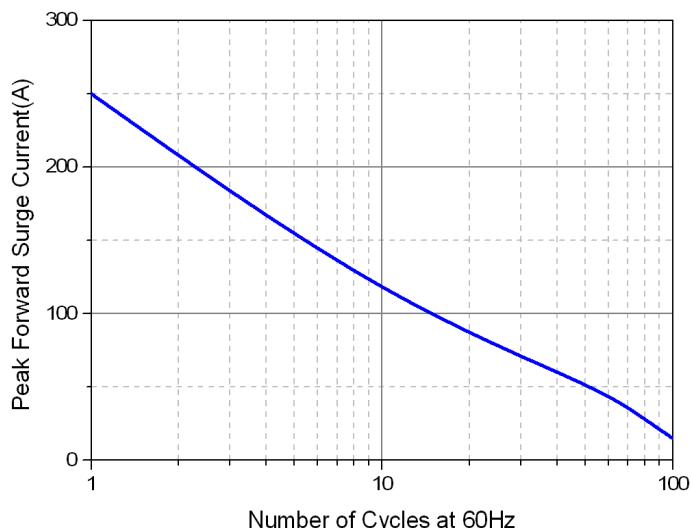
Typical Forward Current Derating Curve



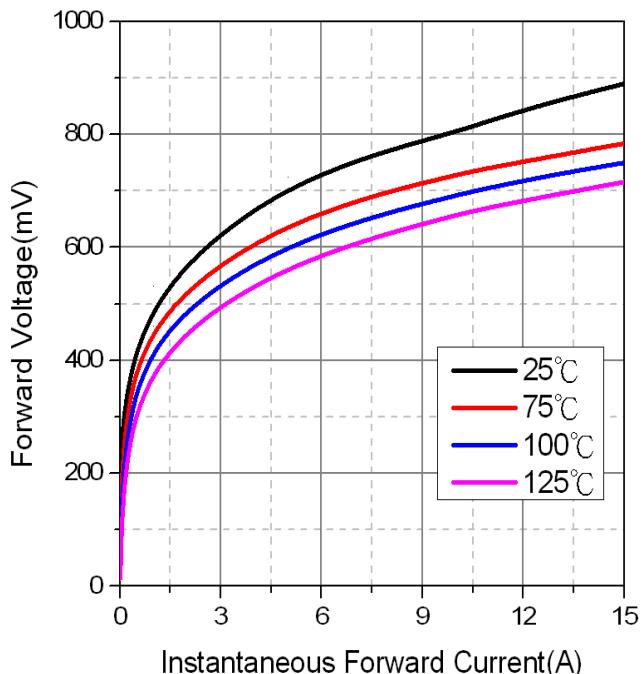
Typical Junction Capacitance



Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Reverse Characteristic

