

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

TO-277B

FEATURES

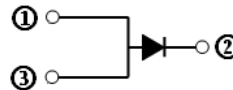
- Planar MOS Schottky technology
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

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

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



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.40	6.60	G	0.85	0.95
B	0.90	1.10	H	3.90	4.10
C	5.70	5.90	I	0.25 REF.	
D	1.80	1.95	J	1.75	1.85
E	0.75	0.85	K	2.95	3.05
F	3.45	3.60			

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}	60	V
Working Peak Reverse Voltage	V_{RSM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	I_{FSM}	150	A
Voltage Rate of Change (Rated V_R)	dv/dt	10000	V / μ s
Typical Thermal Resistance	$R_{\theta JC}$	2	°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-40~150	°C

ELECTRICAL CHARACTERISTICS

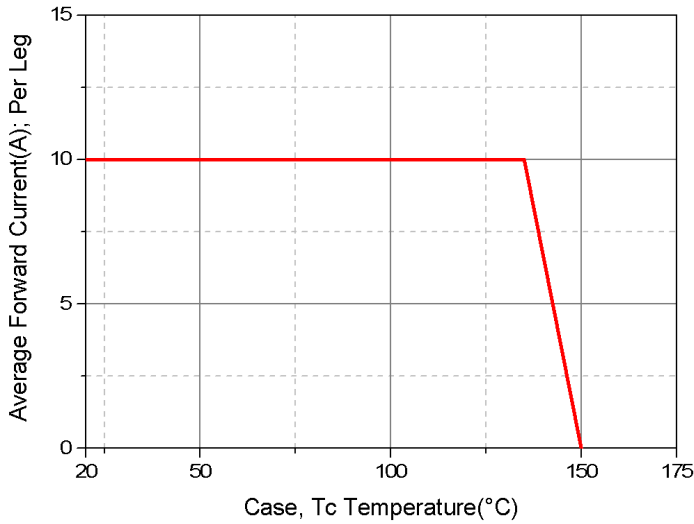
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.38	0.41	V	$I_F = 3A, T_J = 25^\circ C$
		0.44	0.49		$I_F = 5A, T_J = 25^\circ C$
		0.56	0.6		$I_F = 10A, T_J = 25^\circ C$
		0.54	-		$I_F = 10A, T_J = 125^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage ²	I_R	-	0.3	mA	$T_J = 25^\circ C$
		-	15		$T_J = 100^\circ C$
Typical Junction Capacitance ¹	C_J	320	-	pF	

NOTES:

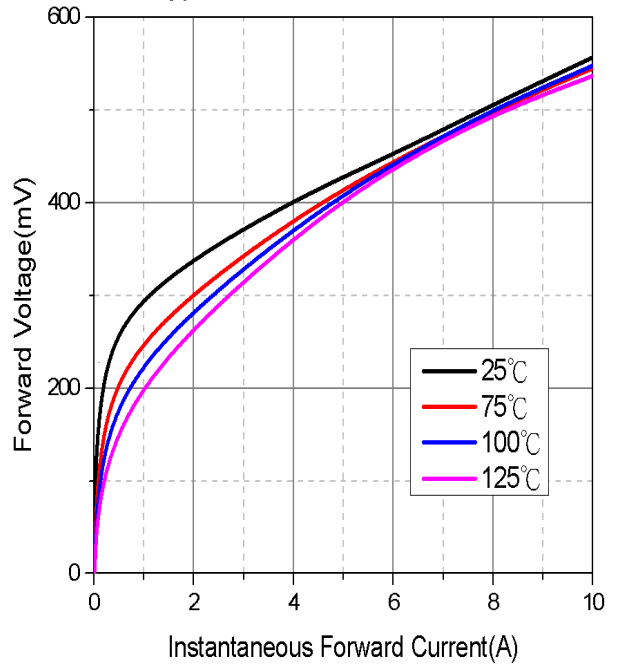
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300 μ s, Duty Cycle \leq 2.0%.

RATINGS AND CHARACTERISTIC CURVES

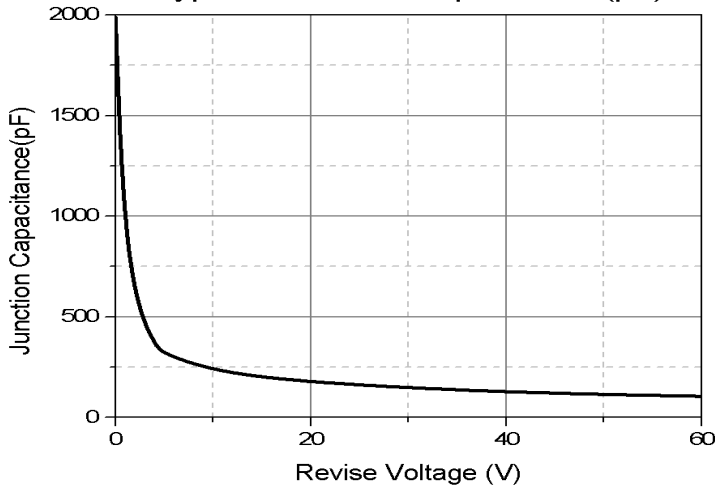
Typical Forward Current Derating Curve



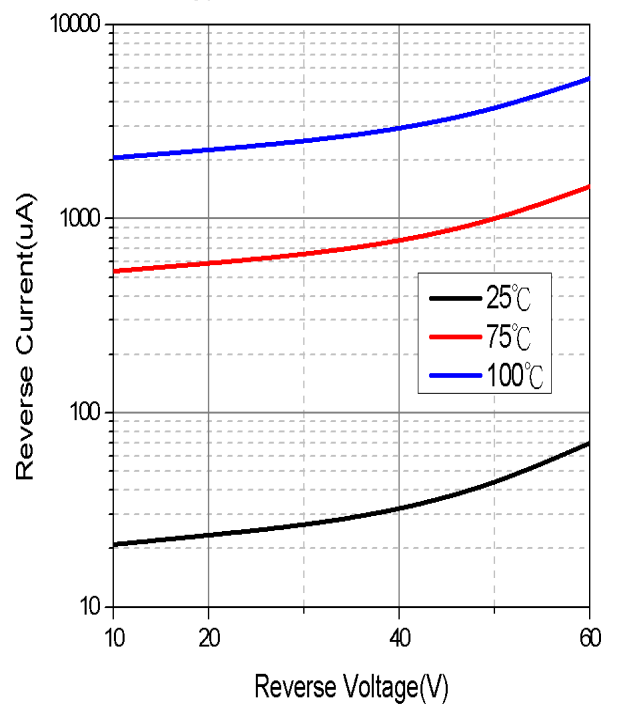
Typical Forward Characteristic



Typical Junction Capacitance (pF)



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

