

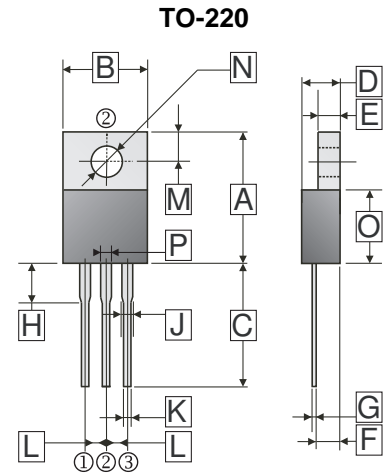
RoHS Compliant Product  
A suffix of "-C" specifies halogen free

## FEATURES

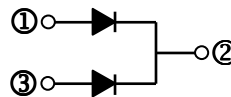
- Planar MOS Schottky technology
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.98 g (Approximate)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	0.7	1.78
B	9.65	10.67	K	0.38	1.02
C	12.50	14.75	L	2.39	2.69
D	3.56	4.90	M	2.50	3.43
E	0.51	1.45	N	3.10	4.09
F	2.03	2.92	O	8.38	9.65
G	0.31	0.76	P	0.89	1.45
H	3.5	4.5			



## 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	$V_{RRM}$	45	V
Working Peak Reverse Voltage	$V_{RSM}$	45	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current	$I_F$	15	A
(Per Leg)		30	
(Per Device)			
Peak Forward Surge Current, 8.3 ms single half sine-wave	$I_{FSM}$	280	A
Voltage Rate of Change (Rated $V_R$ )	$dv/dt$	10000	V / $\mu$ s
Typical Thermal Resistance	$R_{\theta JC}$	2	$^{\circ}$ C /W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-40~150	$^{\circ}$ C

## ELECTRICAL CHARACTERISTICS

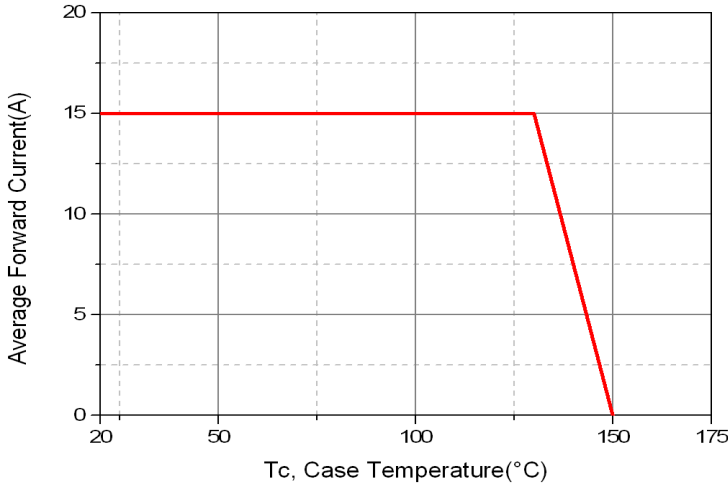
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_F$	0.33	0.36	V	$I_F = 3A, T_J = 25^{\circ}$ C
		0.37	0.41		$I_F = 5A, T_J = 25^{\circ}$ C
		0.43	0.46		$I_F = 10A, T_J = 25^{\circ}$ C
		0.49	0.52		$I_F = 15A, T_J = 25^{\circ}$ C
		0.47	-		$I_F = 15A, T_J = 125^{\circ}$ C
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup>	$I_R$	-	0.3	mA	$T_J = 25^{\circ}$ C
		-	15		$T_J = 100^{\circ}$ C
Typical Junction Capacitance <sup>1</sup>	$C_J$	650	-	pF	

NOTES:

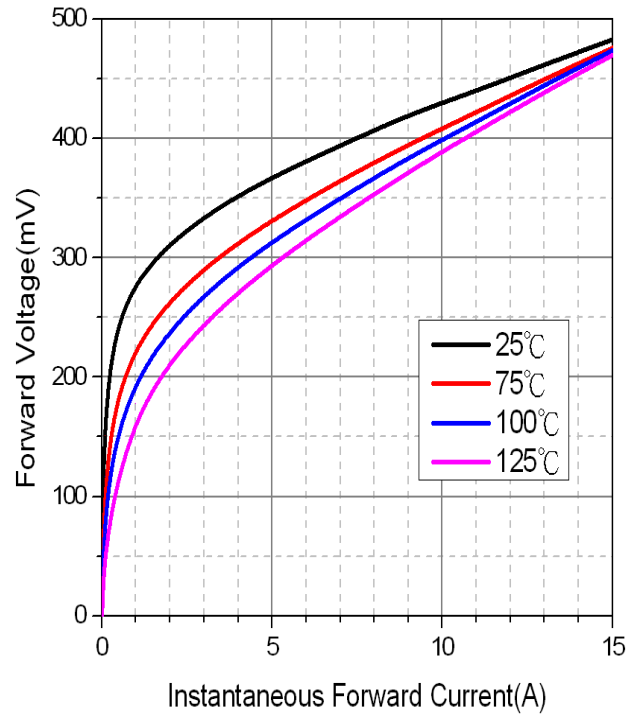
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

**RATINGS AND CHARACTERISTIC CURVES**

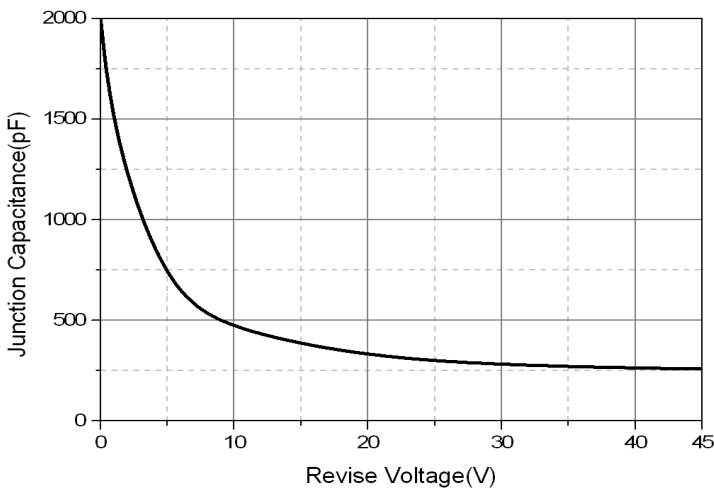
Typical Forward Current Derating Curve



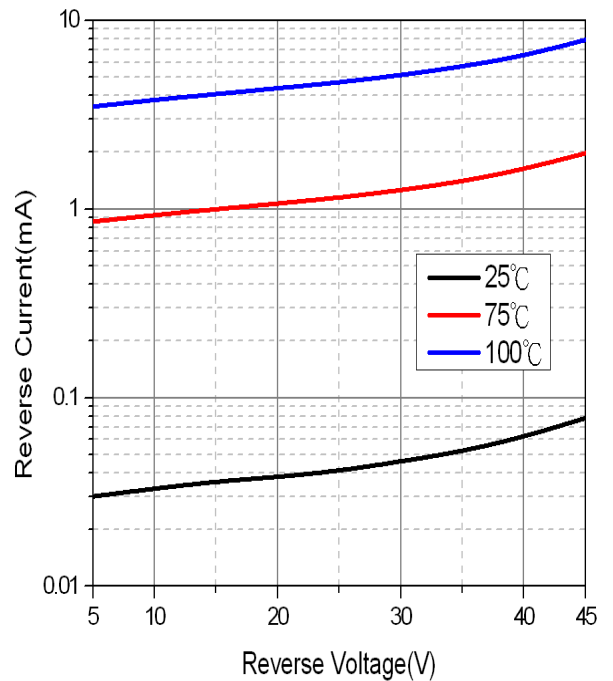
Typical Forward Characteristic



Typical Junction Capacitance(pF)



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

