

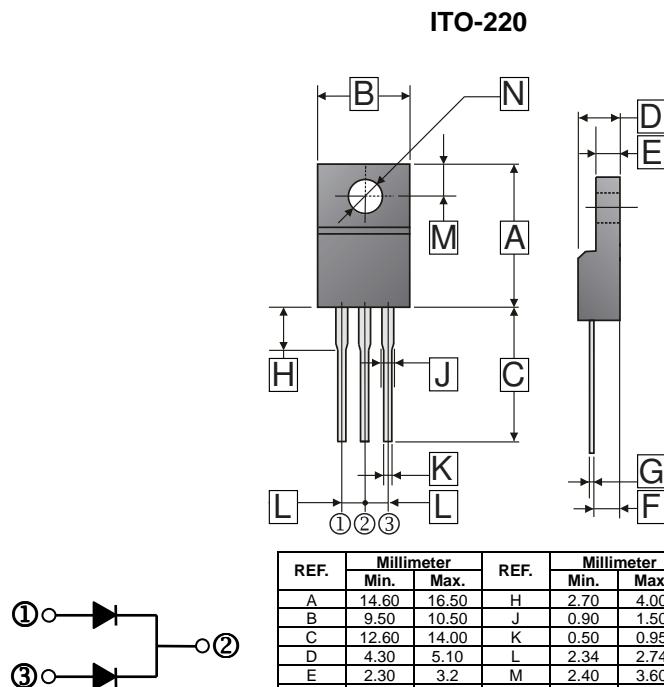
RoHS Compliant Product  
A suffix of "C" specifies halogen free

## FEATURES

- Trench MOS Schottky technology
- Low forward voltage drop
- Low reverse current
- 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)



## 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	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RSM}$	100	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current (Per Leg)	$I_F$	20	A
(Per Device)		40	
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	$R_{\theta JC}$	4	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-40~150	$^{\circ}C$

## ELECTRICAL CHARACTERISTICS

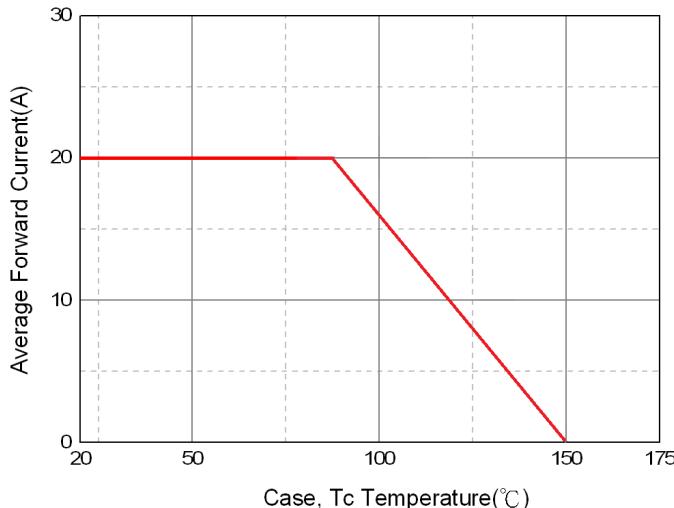
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_F$	0.44	0.47	V	$I_F = 3A, T_J = 25^{\circ}C$
		0.58	0.63		$I_F = 10A, T_J = 25^{\circ}C$
		0.67	0.73		$I_F = 15A, T_J = 25^{\circ}C$
		0.75	0.8		$I_F = 20A, T_J = 25^{\circ}C$
		0.7	-		$I_F = 20 A, T_J = 125^{\circ}C$
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>	$C_J$	740	-	pF	

### NOTES:

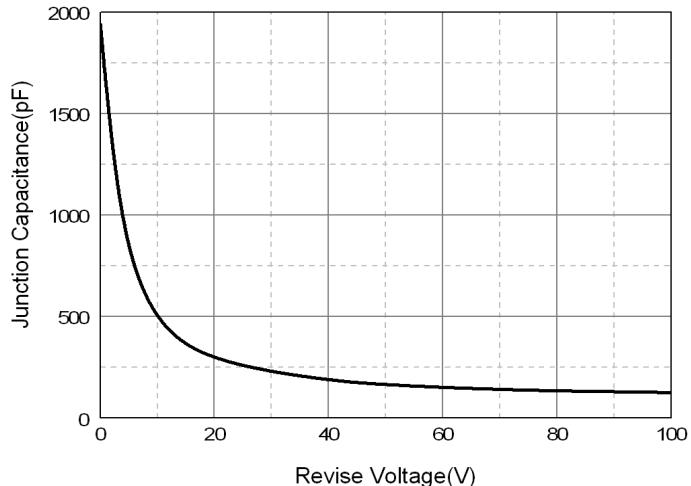
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu s$ , Duty Cycle  $\leq 2.0\%$ .

## RATINGS AND CHARACTERISTIC CURVES

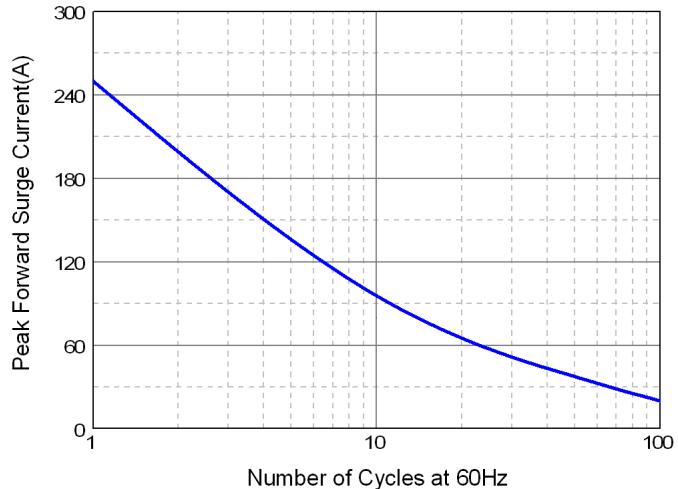
Typical Forward Current Derating Curve



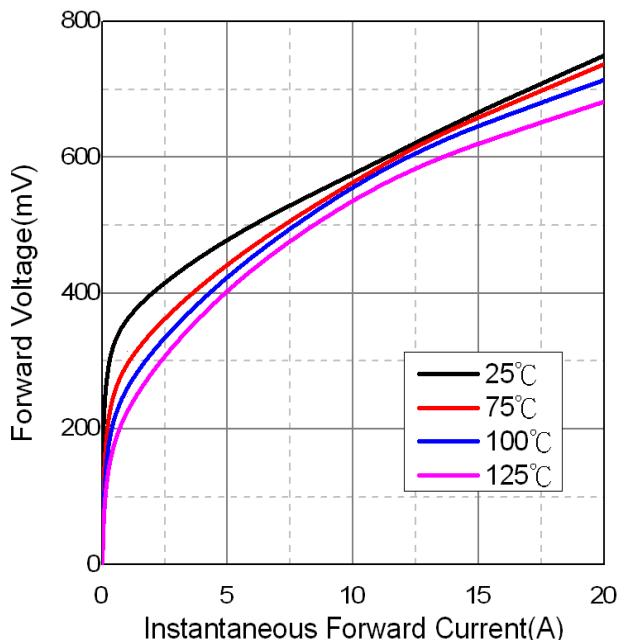
Typical Junction Capacitance



Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Reverse Characteristic

