

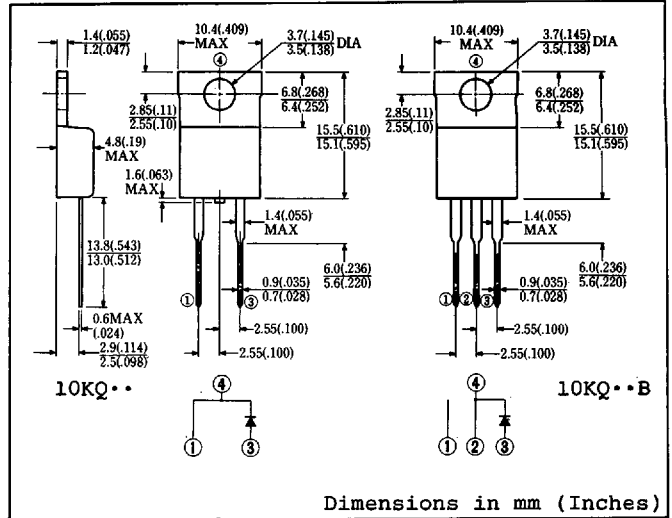
# SCHOTTKY BARRIER DIODE

11A/30~40V

10KQ30 F10KQ30 10KQ40 F10KQ40  
10KQ30B F10KQ30B 10KQ40B F10KQ40B

## FEATURES

- Similar to TO-220AC and TO-220AB Case
- Fully Molded Isolation Case (F-Type)
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 30 Volts through 100 Volts Types Available



Dimensions in mm (Inches)

Approx. Net Weight: 1.85 Grams 1.9 Grams

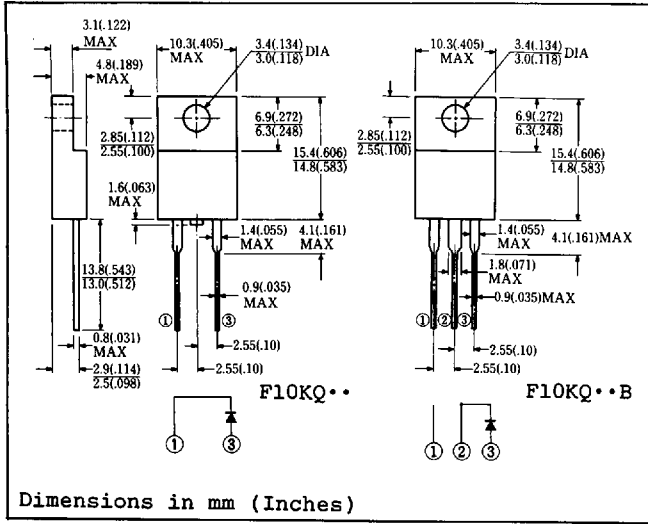
## MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆10KQ30	◆F10KQ30	10KQ40	F10KQ40	Unit
		◆10KQ30B	◆F10KQ30B	10KQ40B	F10KQ40B	
Repetitive Peak Reverse Voltage	$V_{RRM}$	30		40		V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	35		45		V
Electrical Rating	Symbol	Condition			Rating	Unit
Average Rectified Output Current	$I_O$	180° rectangular wave conduction $T_c = 92^\circ\text{C}$			11	A
		180° sinusoidal wave conduction $T_c = 99^\circ\text{C}$			10	
RMS Forward Current	$I_F(\text{RMS})$				15.7	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz, half sine wave, non-repetitive			180	A
Operating Junction Temperature Range	$T_{jw}$				-40 to 125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$				-40 to 125	$^\circ\text{C}$
Mounting Torque	$F_{tor}$	Recommended torque			0.5 (5.1)	N·m (kgf·cm)

## ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition		Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 10\text{A}$	$T_j = 25^\circ\text{C}$	0.59	V
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$	$T_j = 25^\circ\text{C}$	10	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case		3.0	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Case to Fin for F10KQ Type		1.5	

◆ For spare parts only



1.70 Grams

1.75 Grams

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

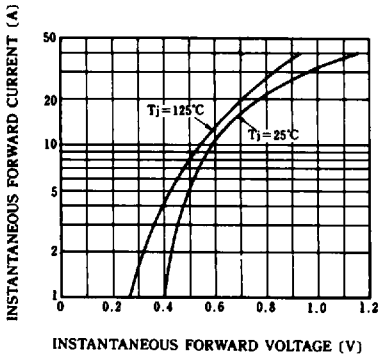


FIG.2-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

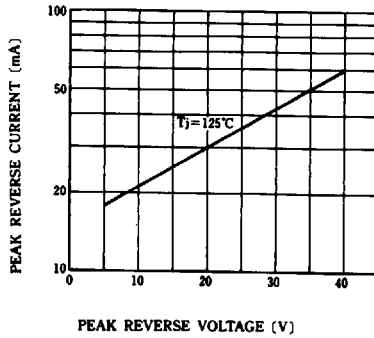


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

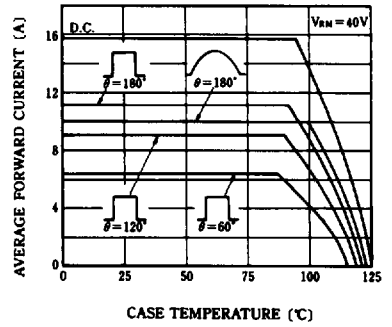


FIG.4-SURGE CURRENT RATINGS

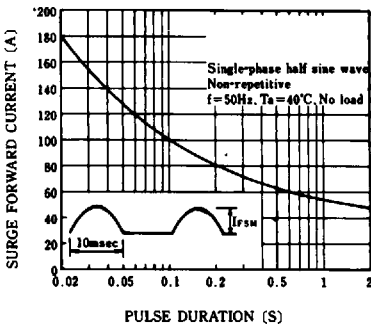


FIG.5-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

