

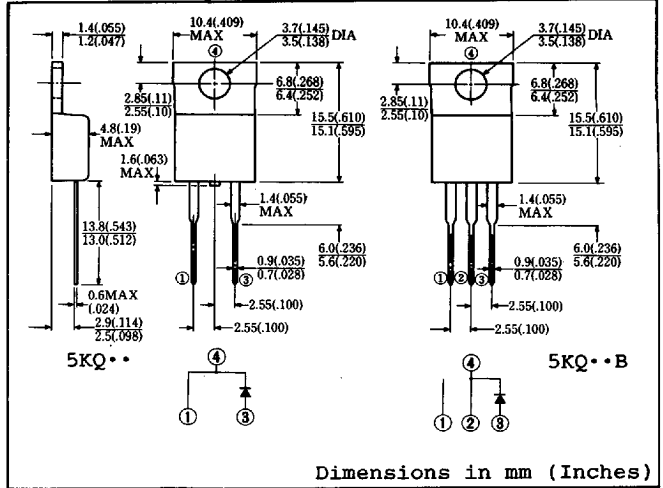
SCHOTTKY BARRIER DIODE

5.5A/30~40V

5KQ30 F5KQ30 5KQ40 F5KQ40
5KQ30B F5KQ30B 5KQ40B F5KQ40B

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
- 20 Volts thru 100 Volts Types Available



Dimensions in mm (Inches)

Approx. Net Weight: 1.85 Grams 1.9 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆ 5KQ30	◆ F5KQ30	5KQ40	F5KQ40	Unit
		◆ 5KQ30B	◆ F5KQ30B	5KQ40B	F5KQ40B	
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 $T_c = 100^\circ C$			5.5	A
		180° sinusoidal wave conduction $T_c = 105^\circ C$			5.0	
RMS Forward Current	$I_{F(RMS)}$				7.9	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive			120	A
Operating Junction Temperature Range	T_{jw}				-40 to 125	°C
Storage Temperature Range	T_{stg}				-40 to 125	°C
Mounting Torque	F_{tor}	Recommended torque			0.5 (5.1)	N•m (kgf•cm)

ELECTRICAL & THERMAL CHARACTERISTICS

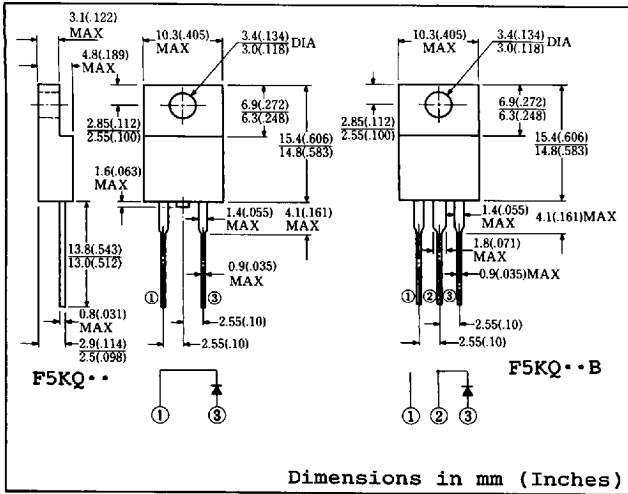
Characteristics	Symbol	Test Condition		Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 5A$	$T_j = 25^\circ C$	0.55	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$	$T_j = 25^\circ C$	5.0	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case		5.0	°C/W
	$R_{th(c-f)}$	Case to Fin for F5KQ Type		1.5	

◆ For spare parts only

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1.70 Grams

1.75 Grams

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

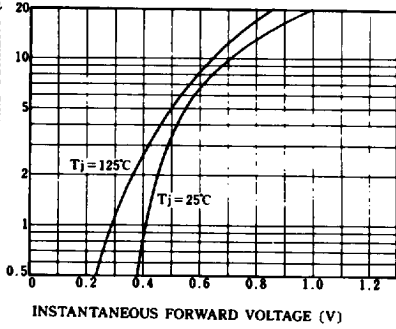


FIG.2-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

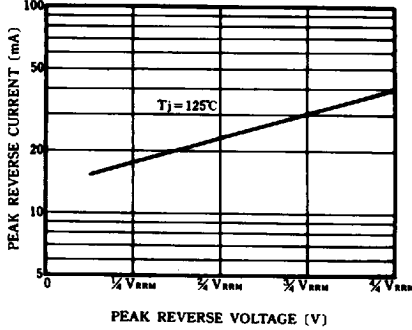


FIG.3-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

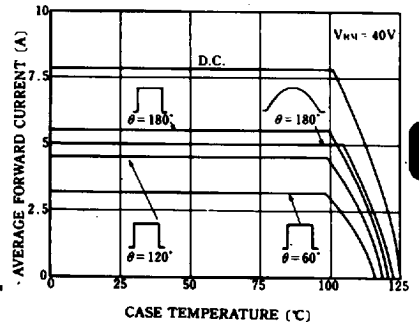


FIG.4-SURGE CURRENT RATINGS

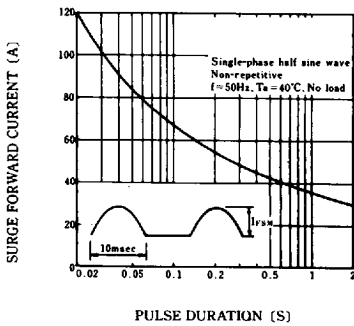
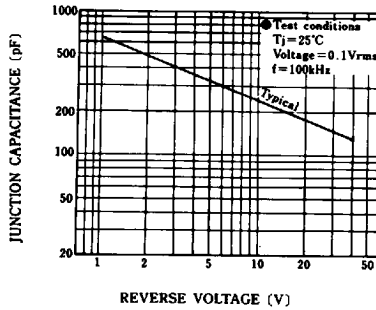


FIG.5-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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