

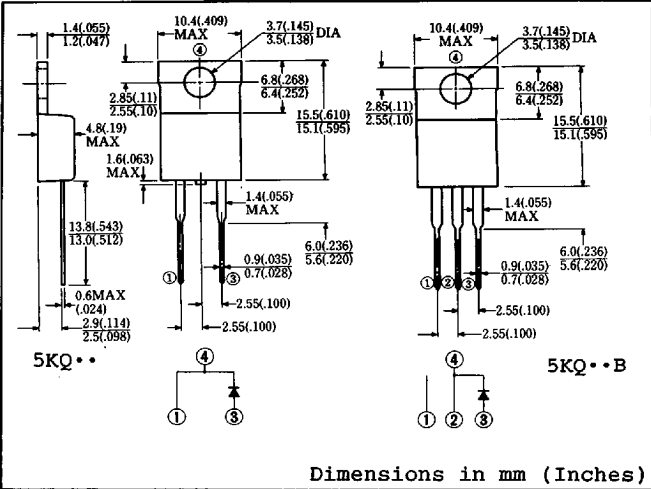
SCHOTTKY BARRIER DIODE

5.5A/50~60V

5KQ50 F5KQ50 5KQ60 F5KQ60
5KQ50B F5KQ50B 5KQ60B F5KQ60B

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



Approx. Net Weight: 1.85 Grams 1.9 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE Symbol	◆5KQ50 ◆5KQ50B	◆F5KQ50 ◆F5KQ50B	5KQ60 5KQ60B	F5KQ60 F5KQ60B	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50		60		V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	55		65		V
Electrical Rating	Symbol	Condition			Rating	Unit
Average Rectified Output Current	I_o	180° rectangular wave conduction $T_c = 96^\circ C$			5.5	A
		180° sinusoidal wave conduction $T_c = 102^\circ C$			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			110	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}	$I_{FM} = 5A$ $T_j = 25^\circ C$	0.58	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

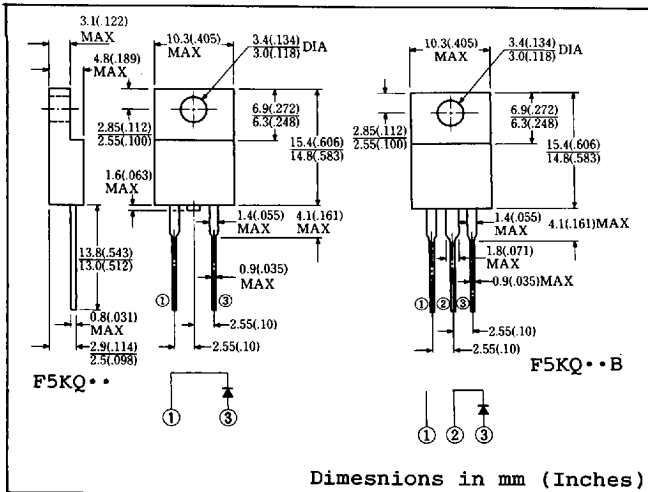


FIG.1-FORWARD VOLTAGE
VS. FORWARD CURRENT

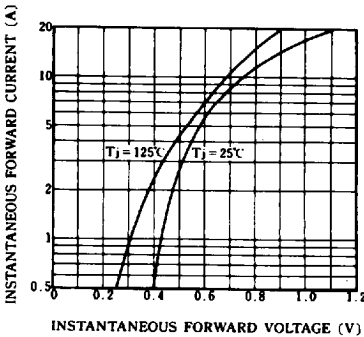


FIG.2-PEAK REVERSE CURRENT
VS. PEAK REVERSE VOLTAGE

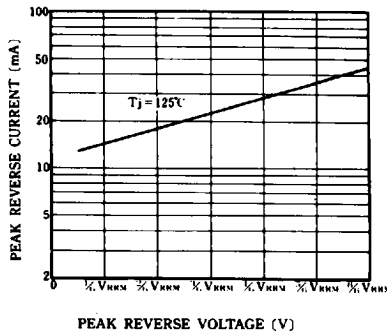


FIG.3-AVERAGE FORWARD CURRENT
VS. CASE TEMPERATURE

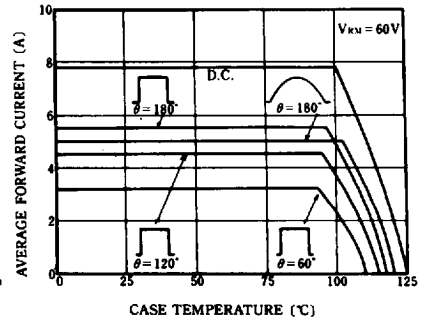


FIG.4-SURGE CURRENT RATINGS

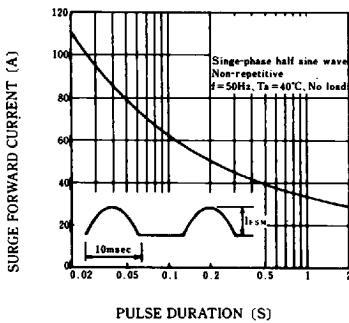
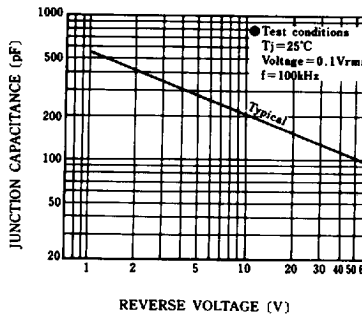


FIG.5-JUNCTION CAPACITANCE
VS. REVERSE VOLTAGE



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