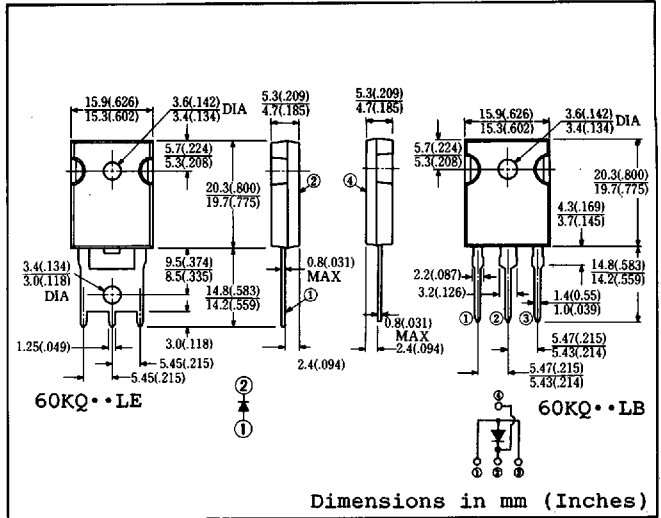


FEATURES

- Similar to TO-247AC (TO-3P) Case
- Extremely Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 10 Volts thru 60 Volts Types Available



Approx. Net Weight: 6 Grams 5.55 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE	◆ 60KQ20LB ◆ 60KQ20LE	60KQ30LB 60KQ30LE	Unit	
	Symbol				
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	V	
Repetitive Peak Surge Reverse Voltage (Pulse Width $\leq 1 \mu\text{SEC}$ (Duty $\leq 1/50$))	V_{RRSM}	25	35	V	
Electrical Rating	Symbol	Condition		Rating	Unit
Average Rectified Output Current	I_o	Full rectangular wave conduction $T_c = 84^\circ\text{C}$		66	A
		Full sinusoidal wave conduction $T_c = 94^\circ\text{C}$		60	
RMS Forward Current	$I_{F(RMS)}$			94	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive		800	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}	$I_{FM} = 60\text{A}$ $T_j = 25^\circ\text{C}$ per diode leg	0.49	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25^\circ\text{C}$ per diode leg	40	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	0.75	$^\circ\text{C/W}$

◆ For spare parts only

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FIG.1-FORWARD CURRENT VS. FORWARD VOLTAGE

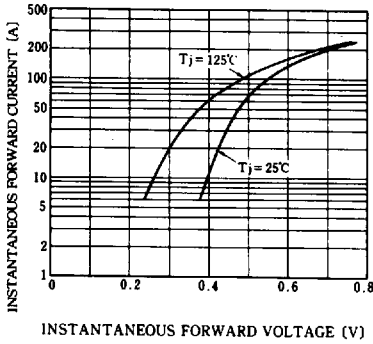


FIG.2-AVERAGE FORWARD POWER DISSIPATION

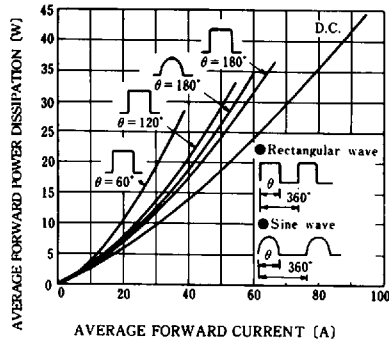


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

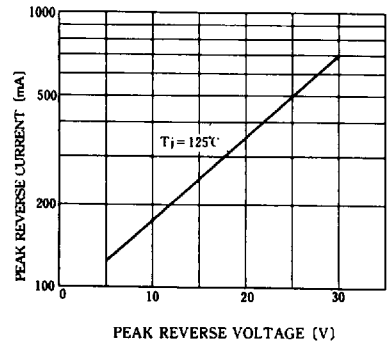


FIG.4-AVERAGE REVERSE POWER DISSIPATION

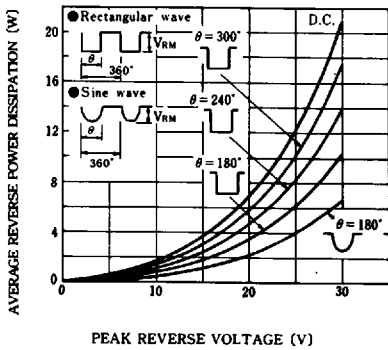


FIG.5-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

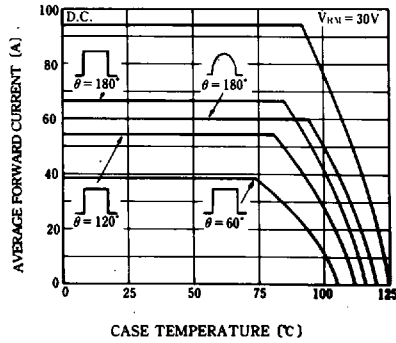


FIG.6-SURGE CURRENT RATINGS

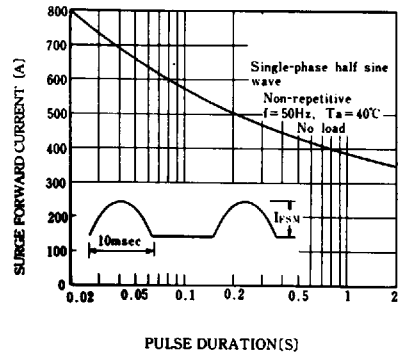


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

