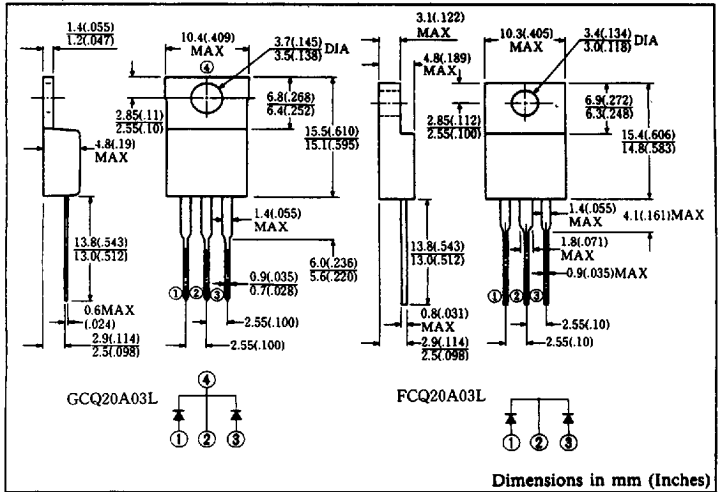


FEATURES

- TO-220AB : GCQ30A03L
- TO-220AB Fully Molded Isolation : FCQ20A03L
- Dual Diodes - Cathode Common
- Low Forward Voltage Drop
- High Surge Capability



Approx. Net Weight : 1.9 Grams 1.75 Grams

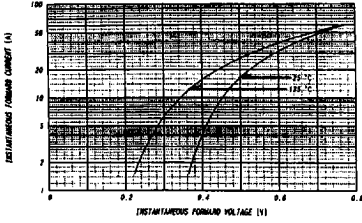
MAXIMUM RATINGS

Voltage Rating	Type	GCQ30A03L FCQ30A03L		Unit
	Symbol			
Repetitive Peak Reverse Voltage	V_{RRM}	30		V
Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current	I_o	50Hz full sine wave $T_c=93^{\circ}C$	30	A
RMS Forward Current	$I_{F(RMS)}$		33.3	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave 1 cycle, non-repetitive	250	A
Operating Junction Temperature Range	T_{jw}		-40 to 125	$^{\circ}C$
Storage Temperature Range	T_{stg}		-40 to 125	$^{\circ}C$
Mounting Torque	F_{tor}	Recommended torque	0.5 5.1	N·m (kgf·cm)

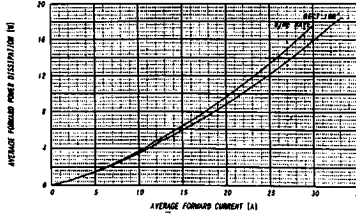
ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM}=15A$ $T_j=25^{\circ}C$ per diode leg	0.49	V
Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}$ $T_j=25^{\circ}C$ per diode leg	15	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	1.5	$^{\circ}C/W$
	$R_{th(c-f)}$	Case to Fin	1.5	

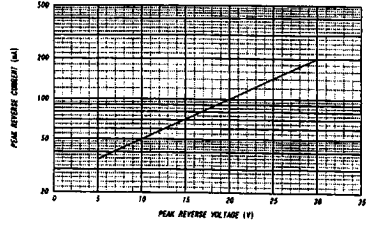
FORWARD CURRENT VS. VOLTAGE



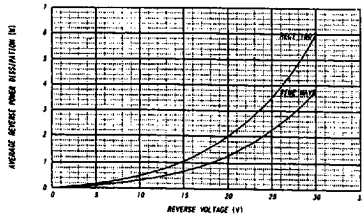
AVERAGE FORWARD POWER DISSIPATION



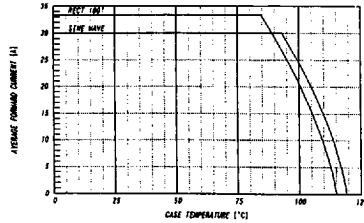
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE
Tj = 125°C



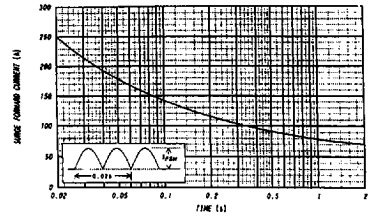
AVERAGE REVERSE POWER DISSIPATION



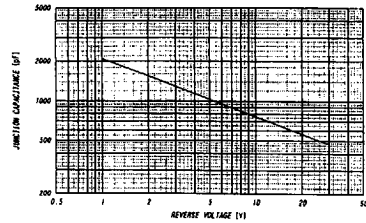
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE
V_{FM} = 30V



SURGE CURRENT RATINGS
I_{SM} = 200A, 200V, 100V, 100ns, 100ns, 100ns Load



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE
Tj = 25°C, V_{FM} = 100V, f = 100kHz, Typical value



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299