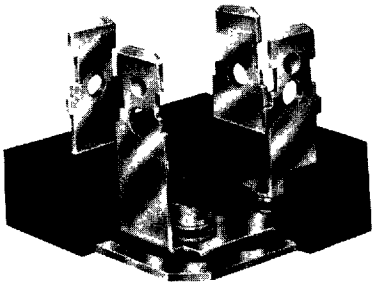
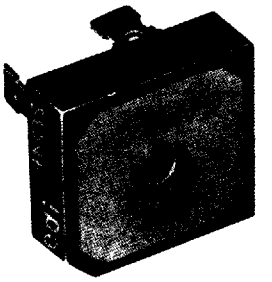
T-23-07

MINIBRIDGE®
35 AMPERE BRIDGE RECTIFIERS
FEATURE LOW OPERATING JUNCTION TEMPERATURE

This mark indicates recognition under the component program of Underwriters Laboratories, Inc.



INTEGRALLY MOLDED HEAT SINKS
LOW THERMAL RESISTANCE
LOW OPERATING JUNCTION TEMPERATURE



Our newly developed unique molding technique enables the molding of a heat sink integrally in the bridge encapsulation for greatly improved heat transfer. Thermal resistance, junction-to-case (θ_{j-C}), capability is 1°C/W. The new design offers superior heat dissipation for lower junction temperature and improved reliability.

PART NUMBER NOMENCLATURE – PEAK REVERSE VOLTAGE (PRV/LEG)

PRV	50V	100V	200V	400V	600V	800V	1000V
PART	3KC3505	3KC3510	3KC3520	3KC3540	3KC3560	3KC3580	3KC35100
NOS	4KC3505	4KC3510	4KC3520	4KC3540	4KC3560	4KC3580	4KC35100

EDI reserves the right to change these specifications at any time without notice

ELECTRICAL CHARACTERISTICS PER LEG
(at T_A = 25°C Unless Otherwise Specified)

	SERIES DESIGNATIONS		
	3KC35	4KC35	
Bridge Output Current, I_F (Av.) © T_C °C	35A @85°C	35A @ 90°C	Amps
Max. Peak Surge Current, I_{FSM} (8.3 ms.)	300	400	Amps.
Max Instantaneous Forward Voltage Drop, V_F = 1.2V. @ I_F = Pulse Test: Pulse Width < 300 μs. Duty cycle < 2.0%	15	17.5	Amps.
Max. D.C. Reverse Current @ PRV and 25°C, I_R	10	10	μA
Max. D.C. Reverse Current @ PRV and 100°C, I_R	100	100	μA
Thermal Resistance, (Total Bridge $R\theta_{j-c}$	1.1 typ.	1.0 typ.	°C/W
Storage Temperature, Range, T_{STG}	−55 to +175°C		

edi ELECTRONIC DEVICES, INC.
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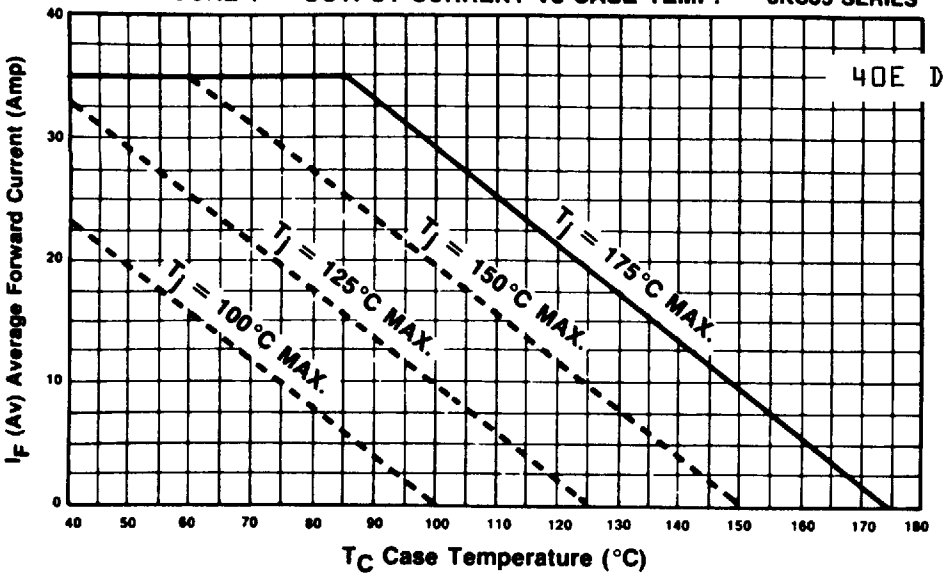
FIGURE 1 – OUTPUT CURRENT Vs CASE TEMP. 3KC35 SERIES



NOTE: For large capacitive loads derate by up to 20%

FIGURE 2 – OUTPUT CURRENT Vs CASE TEMP. 4KC35 SERIES

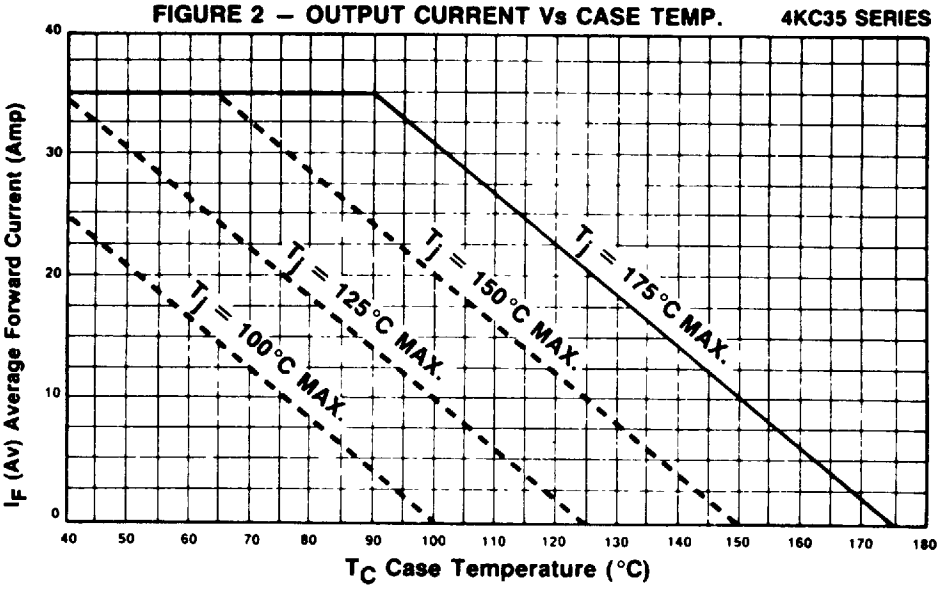
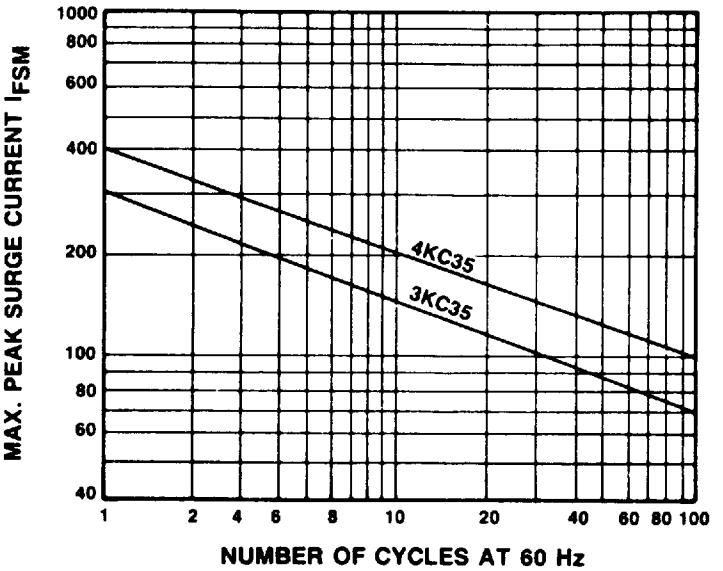


FIGURE 3 – NON-REPETITIVE SURGE CURRENT



NOTES: 1. Corrosion resistant terminals designed for .250 female quick connector, wrap around or solder.
2. A thin film of silicone thermal compound is recommended between the Minibridge® case and mounting surface for improved thermal conduction.
3. Higher dielectric strengths available. Consult factory.

KC35 SERIES MECHANICAL OUTLINE

Dielectric Test Voltage
2500 V RMS max., 50-60 Hz