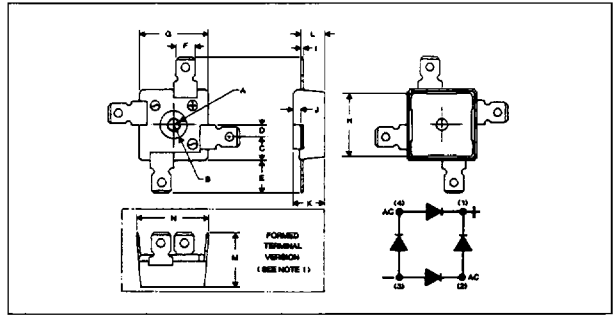


30 Amp Fast Recovery Epoxy Bridge Rectifiers

30 Amps DC Forward Current at $T_C = 60^\circ\text{C}$
 150 Amps Peak One Half Cycle Surge Current
 Externally Exposed Copper Mounting Pad
 For Low Thermal Resistance
 2200 Volts Minimum Circuit-to-Case Insulation

LTR.	INCHES	MILLIMETERS
A	.162-.168 Dia.	4.11-4.27 Dia.
B	.345-.355 Dia.	8.76-9.02 Dia.
C	.23-.27 Typ.	5.84-6.86 Typ.
D	.138-.158 Typ.	3.51-4.01 Typ.
E	.38-.42 Typ.	9.65-10.67 Typ.
F	.245-.255 Typ.	6.22-6.48 Typ.
G	.85-.89 Sq.	21.59-22.61 Sq.
H	.76-.78 Sq.	19.30-19.81 Sq.
I	.030-.034 Typ.	.76-.86 Typ.
J	.09-.11	2.29-2.79 Typ.
K	.38-.42	9.65-10.67
L	.29-.30	7.37-7.62
M	.75 Max.	19.05 Max.
N	.89-1.04 Typ.	22.61-26.42 Typ.



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise specified)

RATINGS	SYMBOL	VK048X	VK148X	VK248X	VK448X	VK648X	UNITS
DC Blocking Voltage	V_R						
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	Volts
Peak Repetitive Reverse Voltage	V_{RRM}						
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	Volts
Peak Surge Current, 1/2 Cycle at 60 Hz, (Non-Rep) and $T_C = 60^\circ\text{C}$ (Fig. 2)	I_{FSM}			150			Amps
Peak Surge Current, 1 sec. at 60 Hz and $T_C = 60^\circ\text{C}$ (Fig. 2)	I_{FRM}			65			Amps
Avg. Forward Current at $T_C = 60^\circ\text{C}$ (Fig. 1)	I_O			30			Amps
Avg. Forward Current at $T_A = 40^\circ\text{C}$ (No Heat Sink)	I_D			4			Amps
Junction Operating and Storage Temperature Range	T_J, T_{STG}			- 50 to + 135			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise specified)

CHARACTERISTICS	SYMBOL	VK048X	VK148X	VK248X	VK448X	VK648X	UNITS
Maximum Reverse Recovery Time $I_F = 1$ Amp, $I_R = 2$ Amp, $I_{RR} = 0.5$ Amp	t_{rr}			200			nsec
Maximum Instantaneous Forward Voltage Drop (per diode) at 30 Amps (Fig. 3)	V_{FM}			1.8			Volts/ Leg
Maximum Reverse Current at Rated V_{RM} at $T_J = 40^\circ\text{C}$ (Fig. 4)	I_{RM}			50.			μA
Maximum Reverse Current at Rated V_{RM} at $T_J = 135^\circ\text{C}$ (Fig. 4)	I_{RM}			5.0			mA
Insulation Strength From Circuit to Case (min.)				2200			Volts DC
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$			1.0			$^\circ\text{C}/\text{W}$

Recognized Under Components Program of Underwriters Laboratories, Inc.

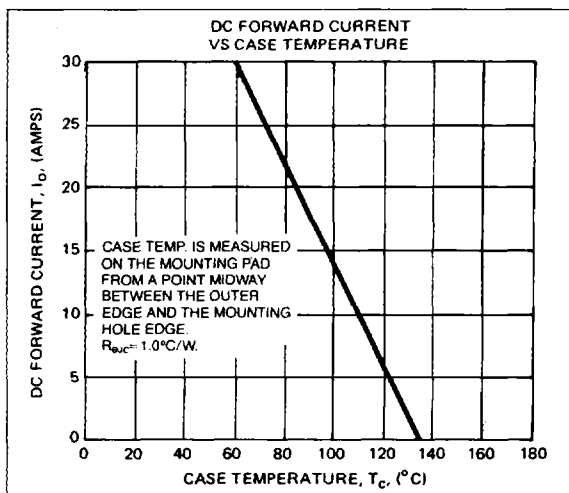


FIGURE 1

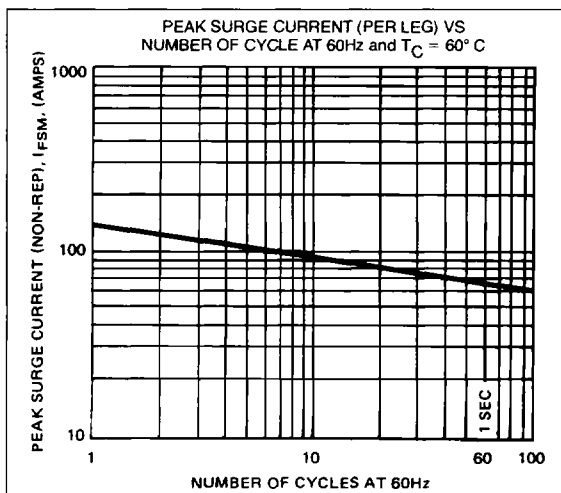


FIGURE 2

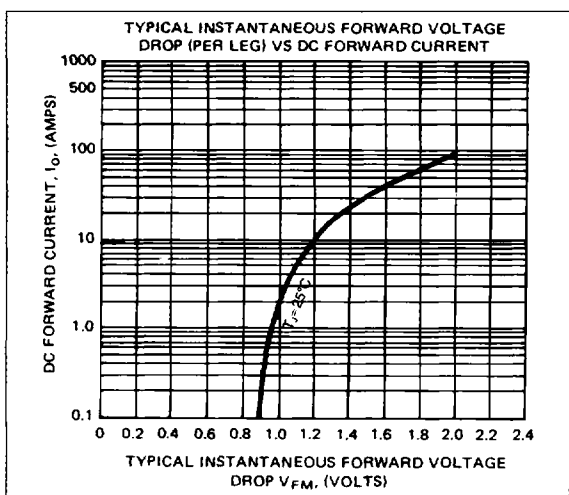


FIGURE 3

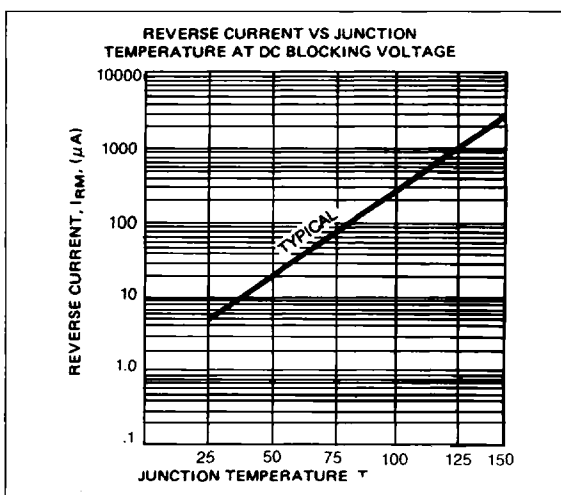


FIGURE 4

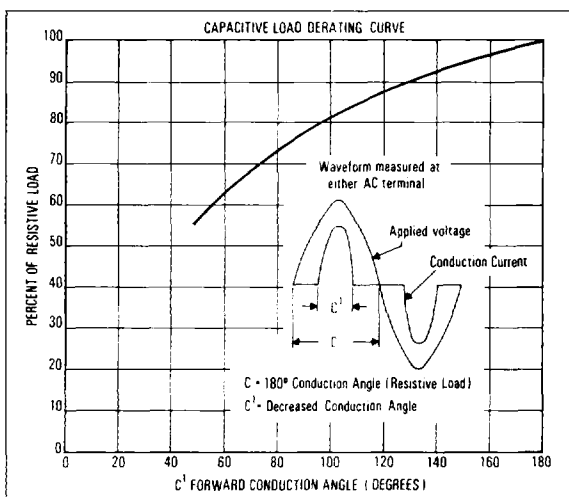


FIGURE 5

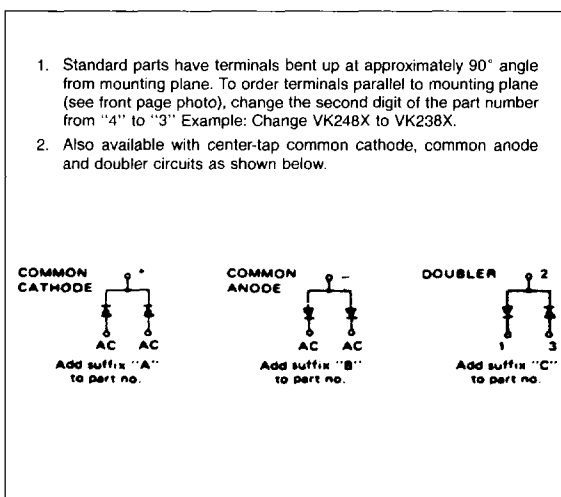


FIGURE 6