



FORWARD INTERNATIONAL ELECTRONICS LTD.

**SEMICONDUCTOR
TECHNICAL DATA**

**KBK25A
THRU
KBK25M**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts **CURRENT - 25 Amperes**

FEATURES

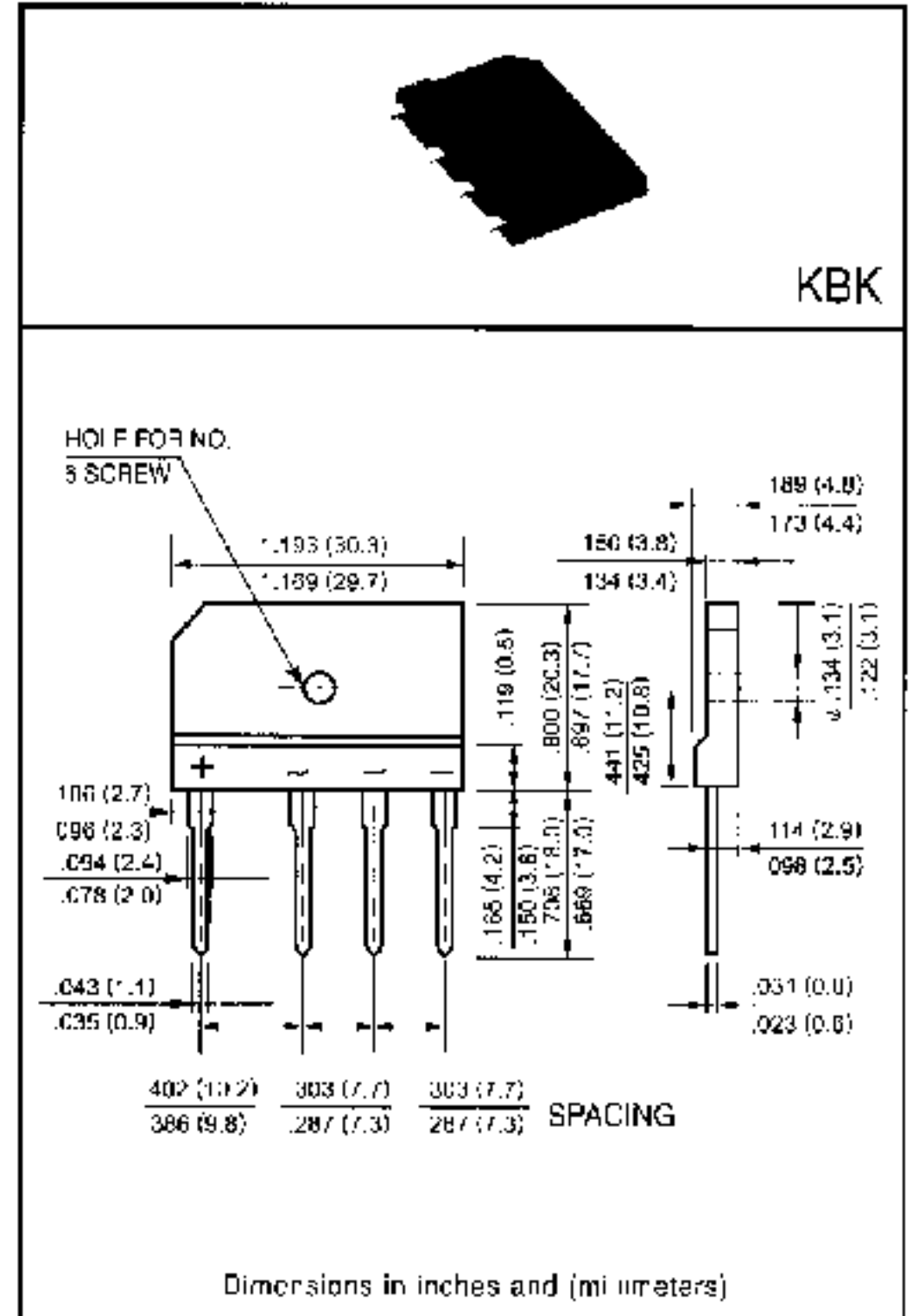
- * Low leakage
- * Low forward voltage
- * Surge overload rating: 300 Amperes peak
- * Ideal for printed circuit boards
- * High forward surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 6.6 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

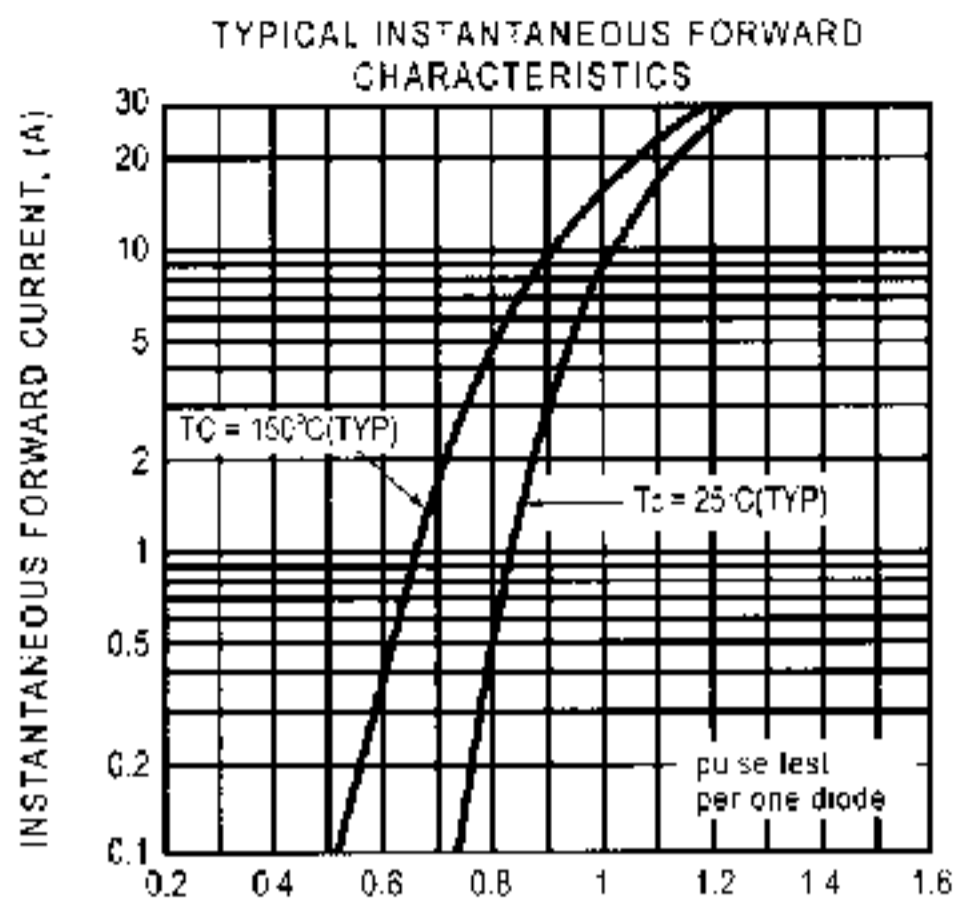


	SYMBOL	KBK25A	KBK25B	KBK25D	KBK25G	KBK25J	KBK25K	KBK25M	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	*000	Volts	
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	500	800	*000	Volts	
Maximum Average Forward Output Current at T _c = 100°C	I _O	25								Amps
Peak Forward Surge Current @ 3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300								Amps
Maximum Forward Voltage Drop per element at 12.5 A DC	V _F	1.1								Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R	@T _A = 25°C							10	uAmps
		@T _A = 100°C								
I ² t Rating for Fusing (t < 8.3ms)	I ² t	510								A ² Sec
Typical Junction Capacitance (Note 1)	C _J	85								pF
Typical Thermal Resistance (Note 2)	R _{θJA}	10								°C/W
Operating Temperature Range	T _J / STG	-55 to +150								°C

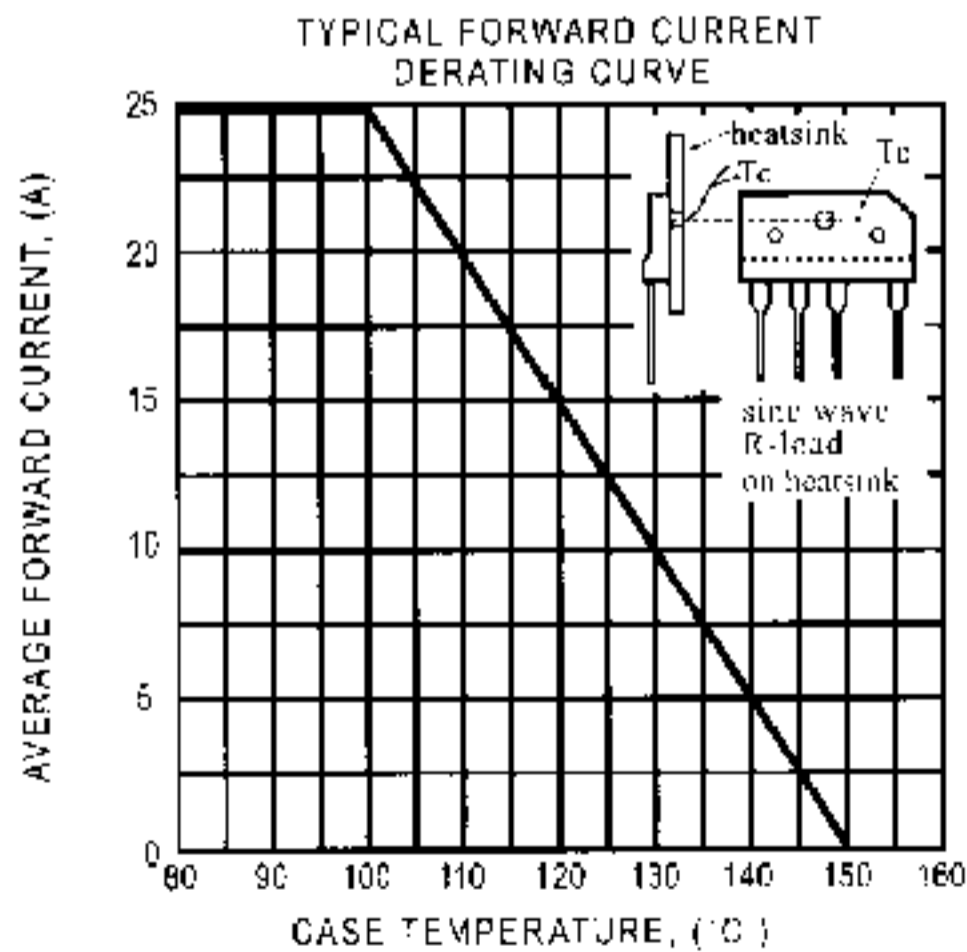
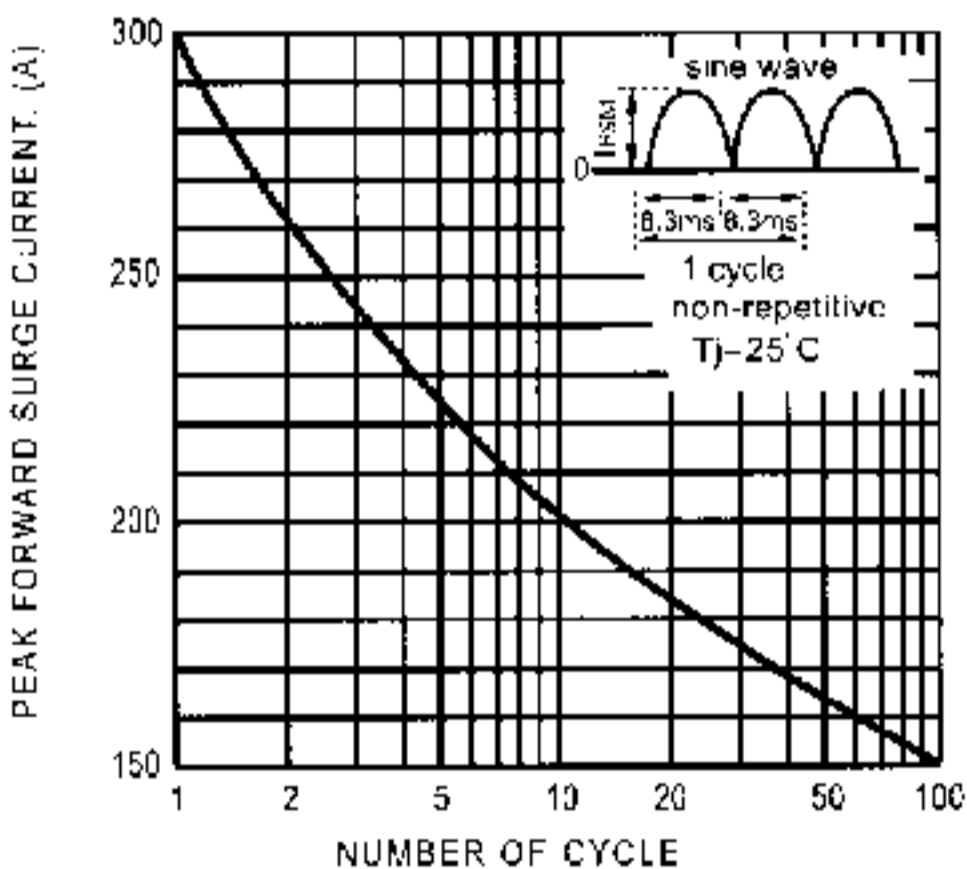
NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Case per element Unit mounted on 300x300x1.6mm Aluminum plate heat-sink

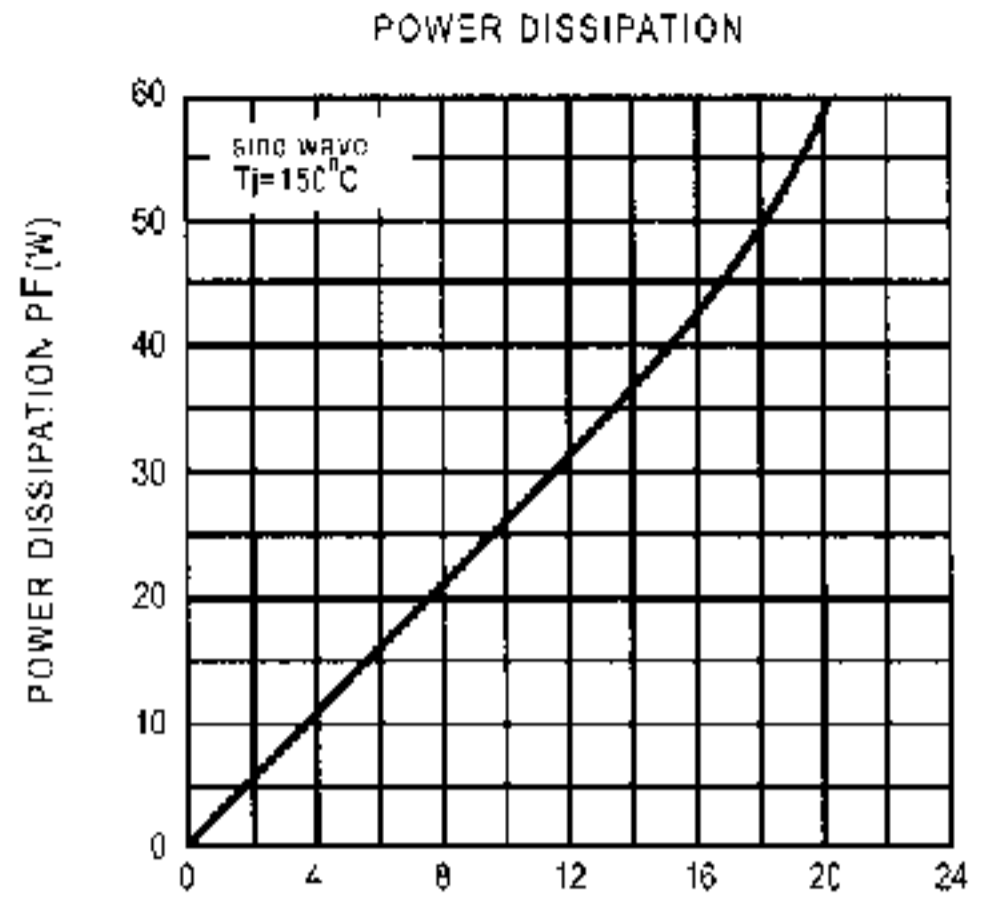
RATING AND CHARACTERISTIC CURVES (KBK25A THRU KBK25M)



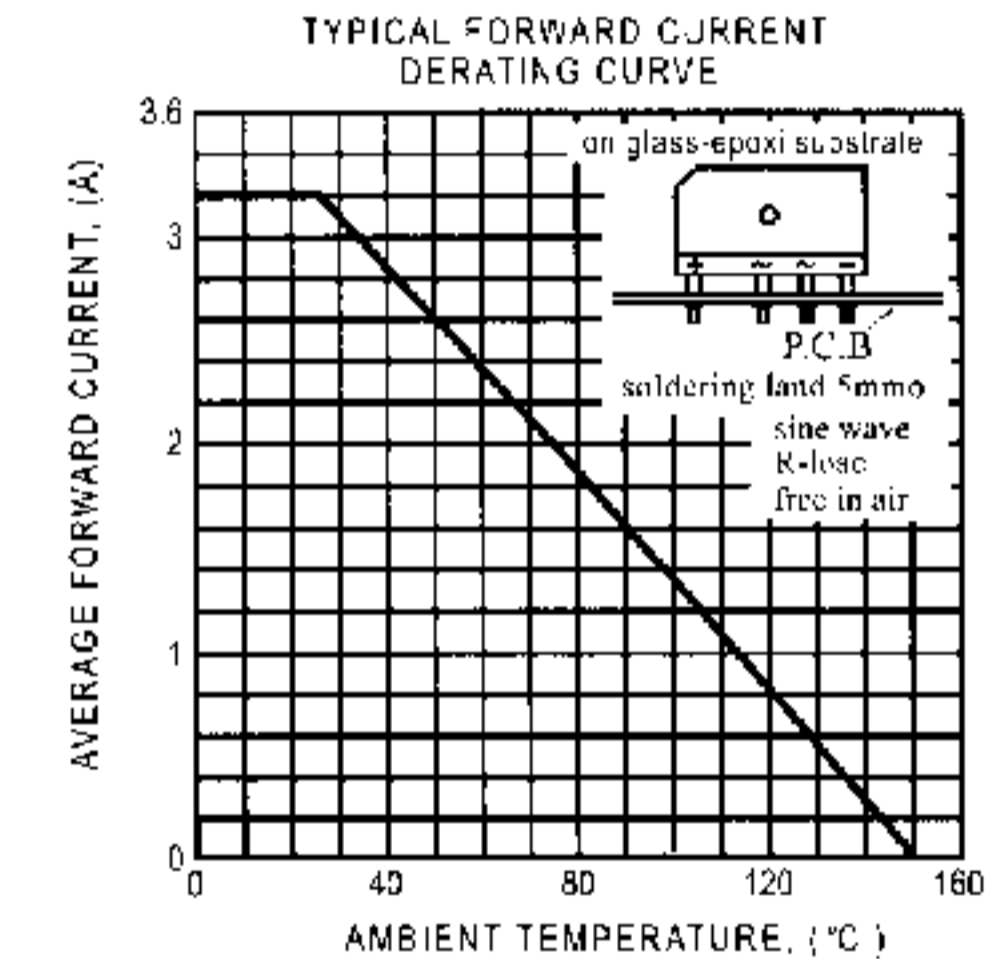
INSTANTANEOUS FORWARD VOLTAGE, (V)
SURGE FORWARD CURRENT CAPABILITY



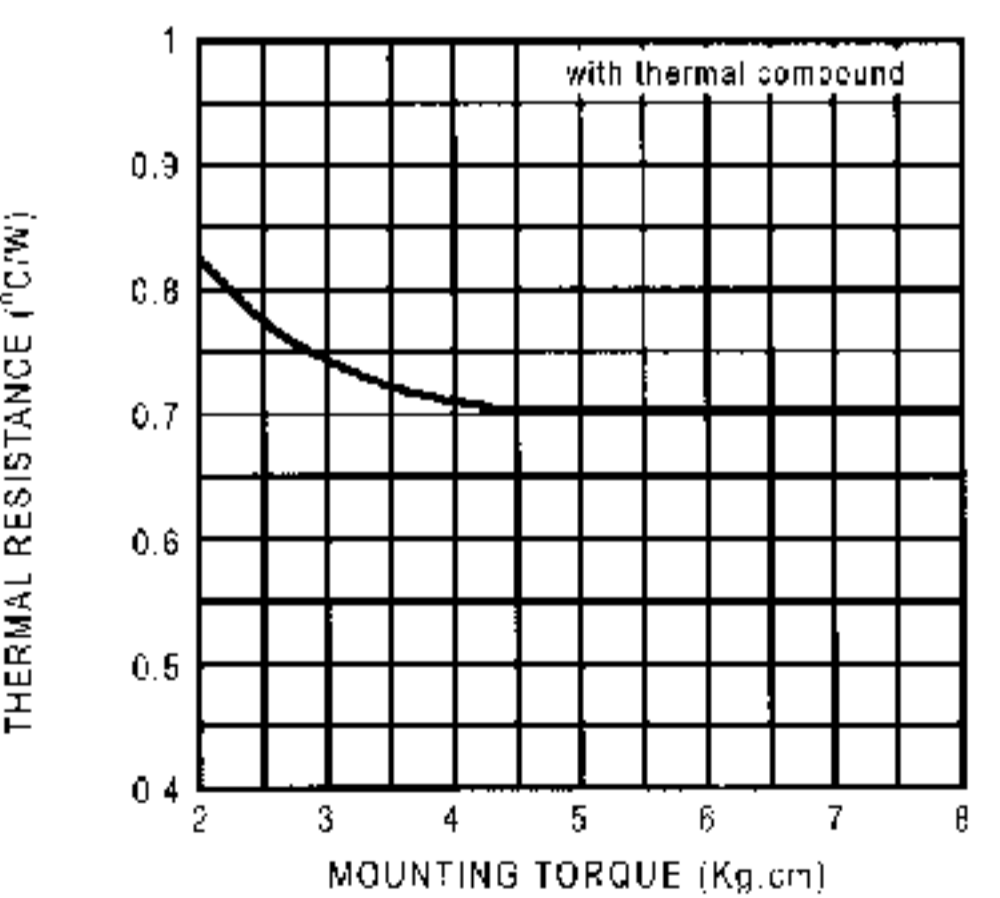
AVERAGE FORWARD CURRENT, (A)
CASE TEMPERATURE, (°C)



POWER DISSIPATION PF(W)
AVERAGE RECTIFIED FORWARD CURRENT, Ic (A)



AVERAGE FORWARD CURRENT, (A)
AMBIENT TEMPERATURE, (°C)



THERMAL RESISTANCE (°C/W)
MOUNTING TORQUE (Kg.cm)