



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**TBL005
THRU
TBL10**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts
CURRENT - 4.0 Amperes

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 200 Amperes peak
- * Molded structure

MECHANICAL DATA

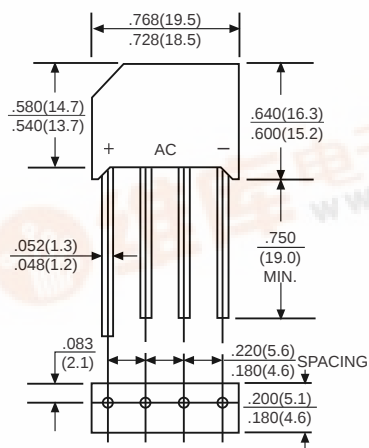
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



TBL



		SYMBOL	TBL005	TBL01	TBL02	TBL04	TBL06	TBL08	TBL10	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	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	600	800	1000	Volts
Maximum Average Forward Output Current at $T_A = 50^{\circ}\text{C}$		I_O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	200							Amps
Maximum Forward Voltage Drop per element at 3.0A DC		V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^{\circ}\text{C}$	I_R	10							μAmps
	@ $T_A = 100^{\circ}\text{C}$		500							
I^2t Rating for Fusing ($t \leq 8.3\text{ms}$)		I^2t	93							A^2Sec
Typical Junction Capacitance (Note1)		C_J	40							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	19							$^{\circ}\text{C/W}$
Operating Temperature Range		T_J	-55 to $+150$							$^{\circ}\text{C}$
Storage Temperature Range		T_{STG}	-55 to $+150$							$^{\circ}\text{C}$

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

2. Thermal Resistance from Junction to Ambient with units mounted on 3.0x3.0x0.11" (7.5x7.5x0.3cm) AL plate.

RATING AND CHARACTERISTIC CURVES (TBL005 THRU TBL10)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

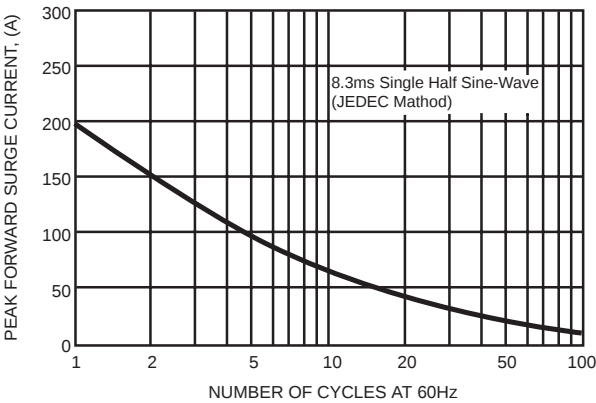


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

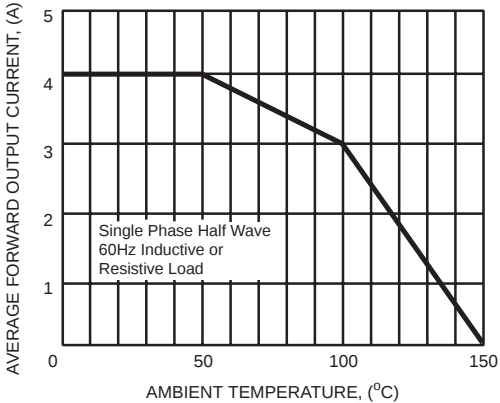


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

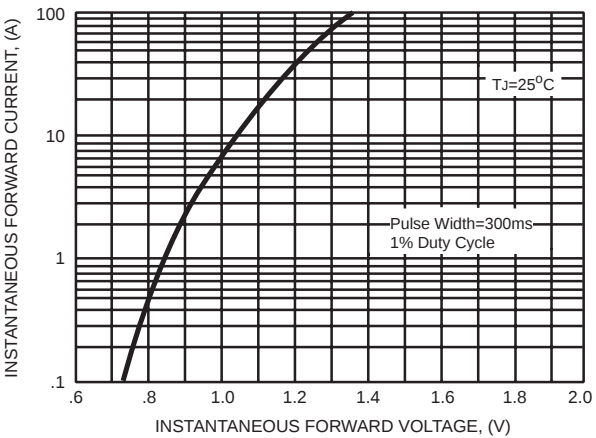


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

