

D3K3005 THRU D3K310

BRIDGE RECTIFIERS GLASS PASSIVATED
 REVERSE VOLTAGE - 50 to 1000Volts
 FORWARD CURRENT - 3.0 Amperes

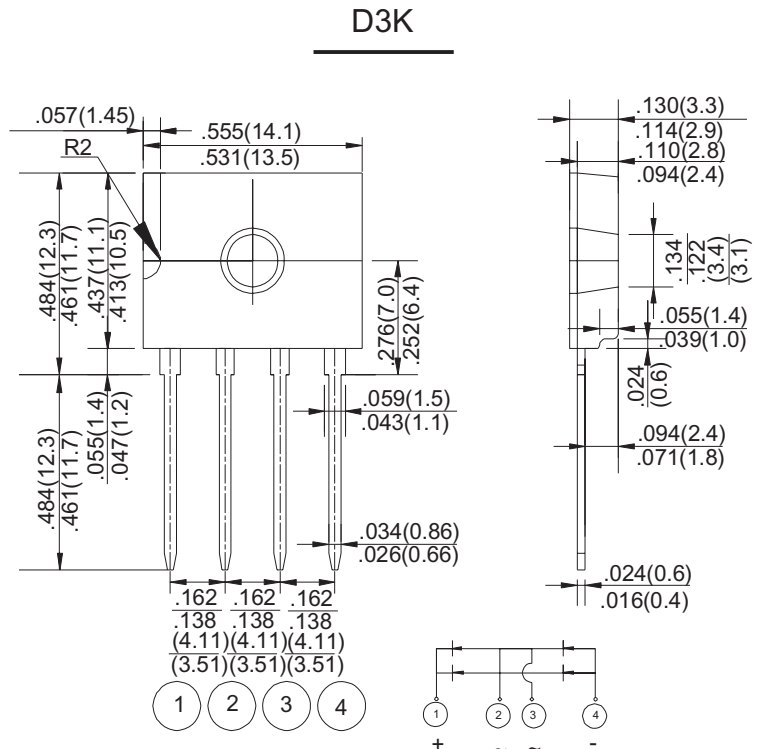


FEATURES

- Glass passivated chip junction
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit board

MACHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	D3K3005	D3K301	D3K302	D3K304	D3K306	D3K308	D3K310	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current @ $T_c=140^\circ\text{C}$ (with heatsink) @ $T_a=29^\circ\text{C}$ (without heatsink)	$I_{(AV)}$					3 1.2			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}					60			A
Maximum Forward Voltage at 1.5A DC	V_F					1.05			V
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t					14.94			A^2s
Maximum Typical Thermal Resistance without heatsink	$R_{\theta Ja}$					55			$^\circ\text{C}/\text{W}$
with heatsink	$R_{\theta Jc}$					1.5			
without heatsink	$R_{\theta JL}$					15			
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_a=25^\circ\text{C}$ @ $T_a=125^\circ\text{C}$	I_R					10.0 500			μA
Operating Temperature Range	T_J					-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}					-55 to +150			$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES D3K3005 THRU D3K310

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

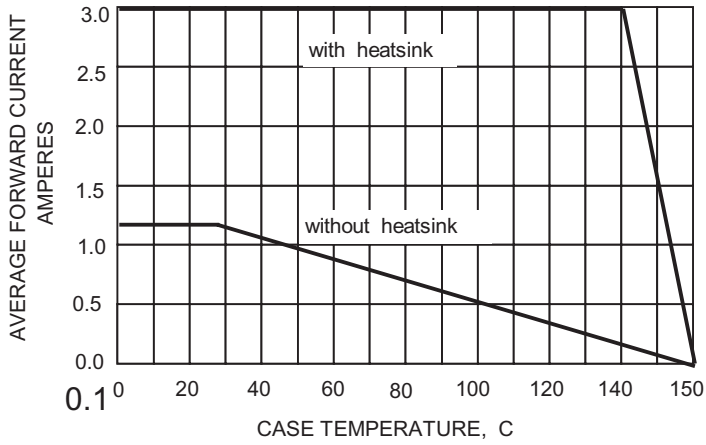


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

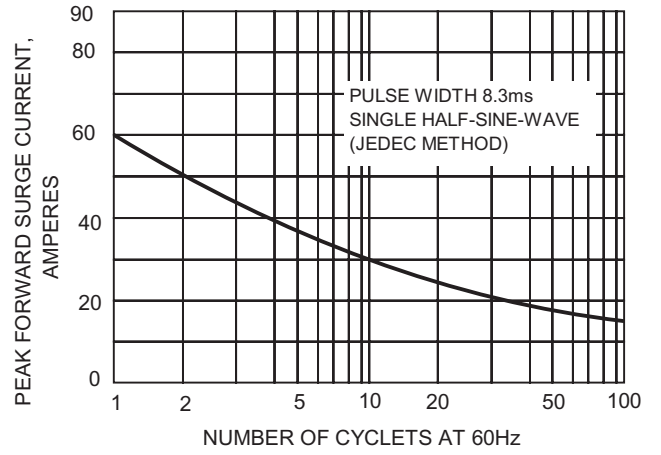


FIG.3-TYPICAL FORWARD CHARACTERISTICS

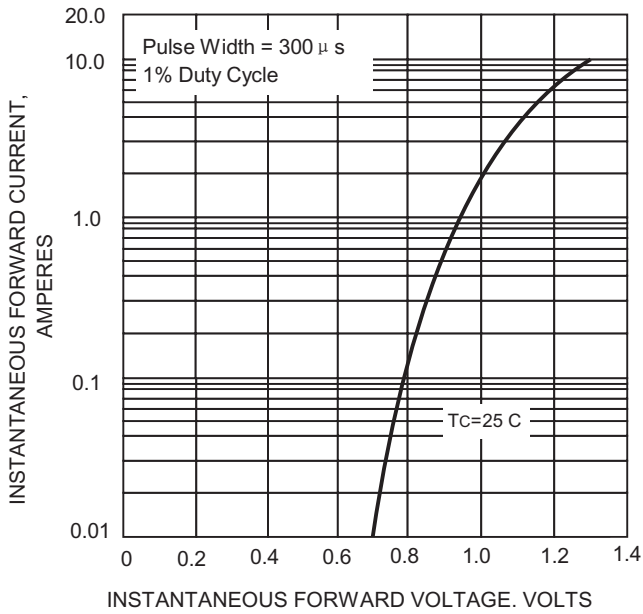


FIG.5-TYPICAL REVERSE CHARACTERISTICS

