

**GLASS PASSIVATED BRIDGE RECTIFIERS**  
VOLTAGE 50 to 1000 Volts CURRENT 3.0 Ampere

**FEATURES**

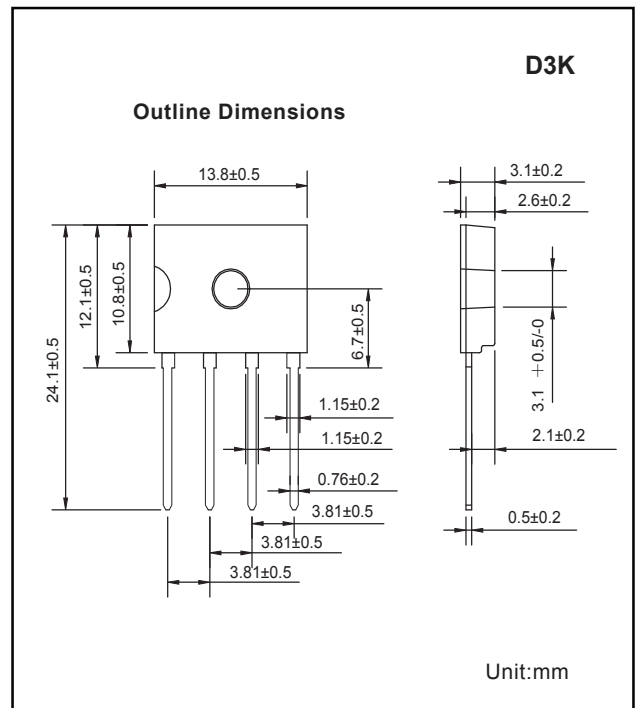
Glass passivated chip junction  
High case dielectric strength  
High surge current capability  
Ideal for printed circuit board

**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

**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	DRS301K	DRS302K	DRS303K	DRS304K	DRS305K	DRS306K	DRS307K	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 @ $T_c=138^{\circ}C$ (with heatsink)	$I_{(AV)}$	3							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	$I_{FSM}$	100							A
Maximum Forward Voltage at 3.0A DC	$V_F$	1.1							V
$I^2t$ Rating for Fusing ( $t<8.3ms$ )	$I^2t$	41.5							$A^2s$
Typical Thermal Resistance	without heatsink	$R_{\theta Ja}$							$^{\circ}C/W$
	with heatsink	$R_{\theta Jc}$							
	without heatsink	$R_{\theta JL}$							
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_a=25^{\circ}C$	1.0							$\mu A$
	@ $T_a=125^{\circ}C$	500							
Operating Temperature Range	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

# RATING AND CHARACTERISTICS CURVES ( DRS301K THRU DRS307K )

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

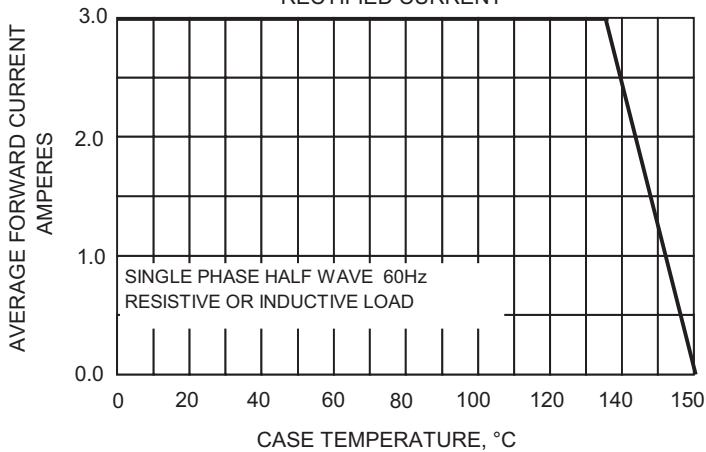


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

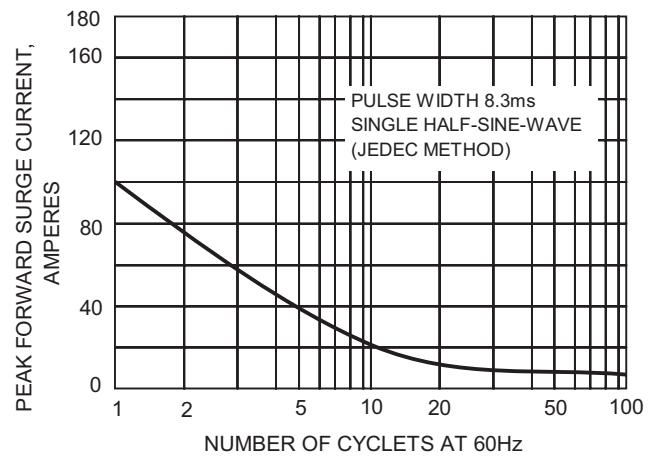


FIG.3-TYPICAL JUNCTION CAPACITANCE

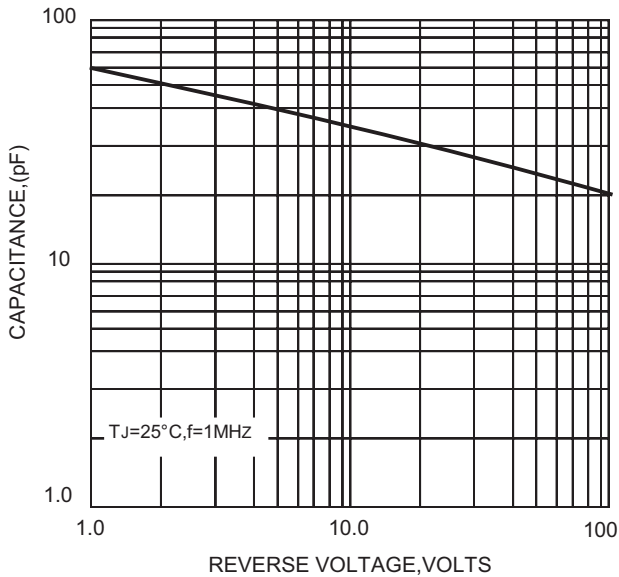


FIG.3-TYPICAL FORWARD CHARACTERISTICS

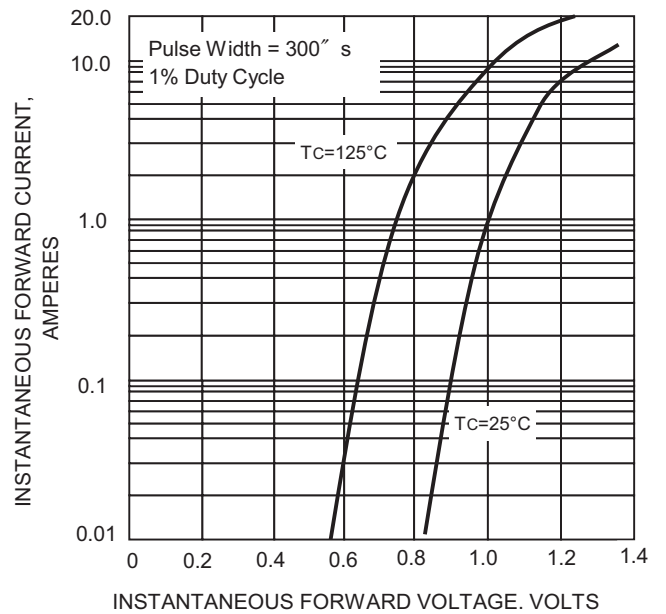
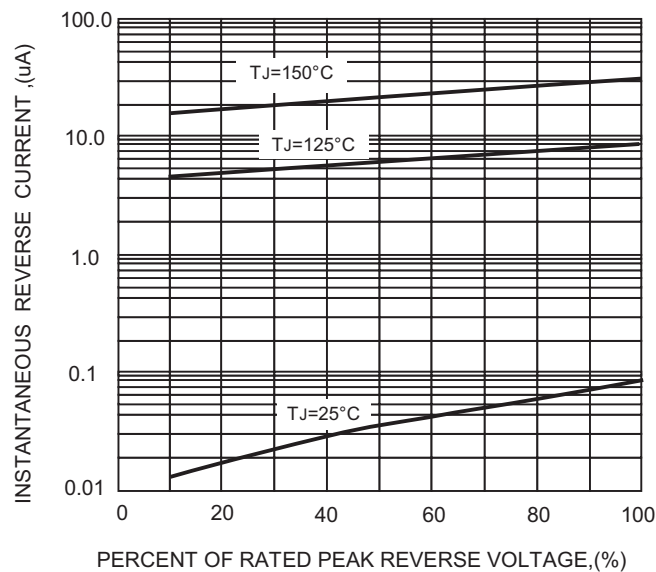
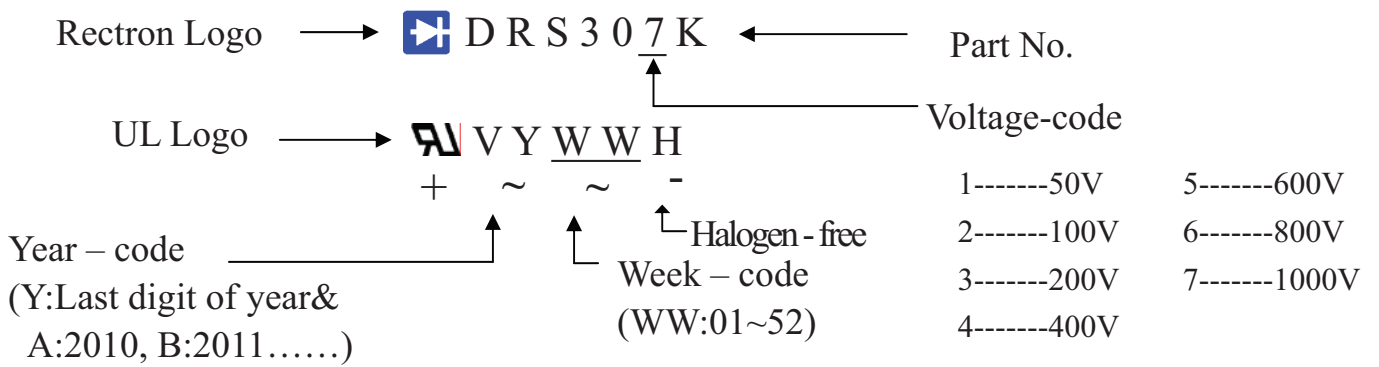


FIG.5-TYPICAL REVERSE CHARACTERISTICS



## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
D3K	-B	500	181*183*37	378*202*200	5,000	9.0

### TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
D3K	-C	3,000	491*145*133	498*330*160	6,000	13.2

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