

HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 3.0 Ampere

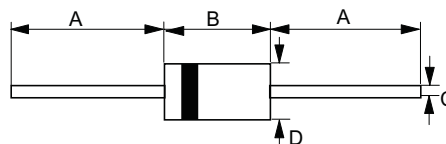
FEATURES

- Plastic passivated chip
- Super fast switching for high efficiency
- High current capability
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 1.071 grams

DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20 \varnothing	1.30 \varnothing
D	5.0 \varnothing	5.60 \varnothing
Dimensions in millimeters		

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%

CHARACTERISTICS	SYMBOL	HER	HER	HER	HER	HER	HER	HER	HER	UNIT	
		301	302	303	304	305	306	307	308		
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current @T _L =75 C	I(AV)	3.0								A	
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I _{FSM}	150								A	
Maximum forward Voltage at 3.0A DC	V _F	1.0		1.3		1.7				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	10.0				100					uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50					75				ns
Typical Junction Capacitance (Note 2)	C _J	20					10				pF
Typical Thermal Resistance (Note 3)	R _{θJL}	30								°C/W	
Operating Temperature Range	T _J	-55 to +150									°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

NOTES : 1.Reverse Recovery Test Conditions :I_F=0.5A,I_R=1.0A,I_{RR}=0.25A.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Thermal Resistance junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

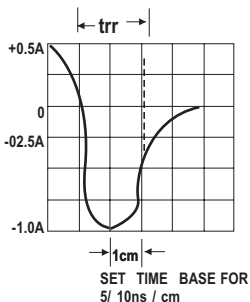
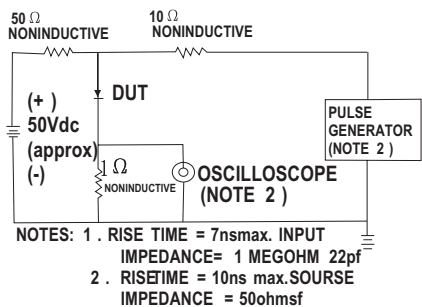


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT DERATING

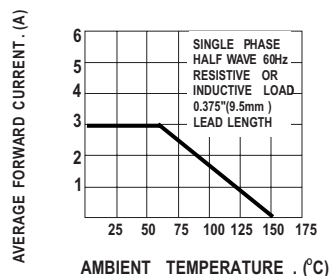


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

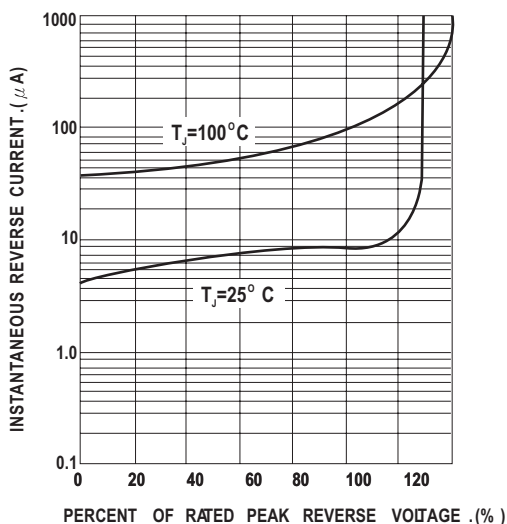


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

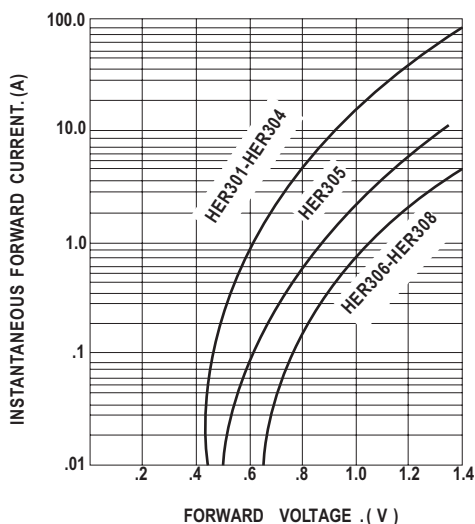


FIG. 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

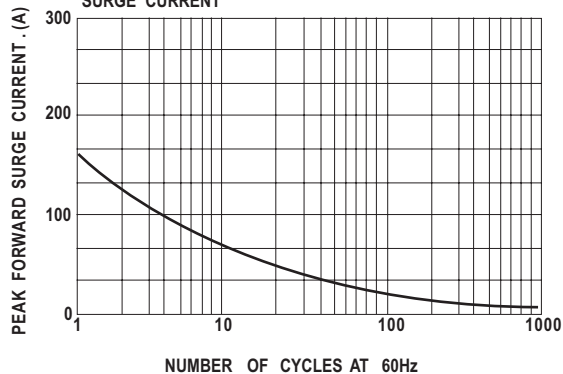


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

