

HIGH EFFICIENCY RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 1.5 Ampere

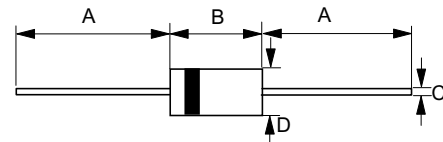
FEATURES

- 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 : 0.015 ounces, 0.4 grams

DO-15



DO-15		
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.70 \varnothing	0.90 \varnothing
D	2.60 \varnothing	3.60 \varnothing
All Dimensions in millimeter		

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
		151	152	153	154	155	156	157	158	
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)	1.5								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I _{FSM}	50								A
Maximum forward Voltage at 1.5A DC	V _F	1.0		1.3		1.70				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0				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

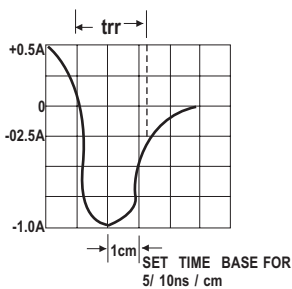
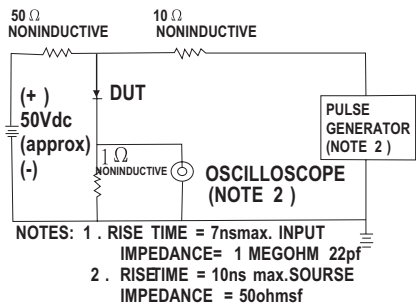


FIG . 2 -MAXIMUM AVERAGE FORWARD CURRENT DERATING

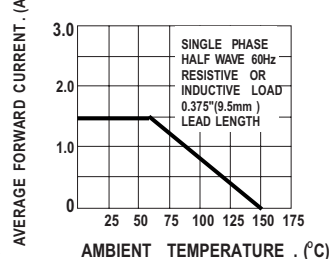


FIG . 3 -TYPICAL REVERSE CHARACTERISTICS

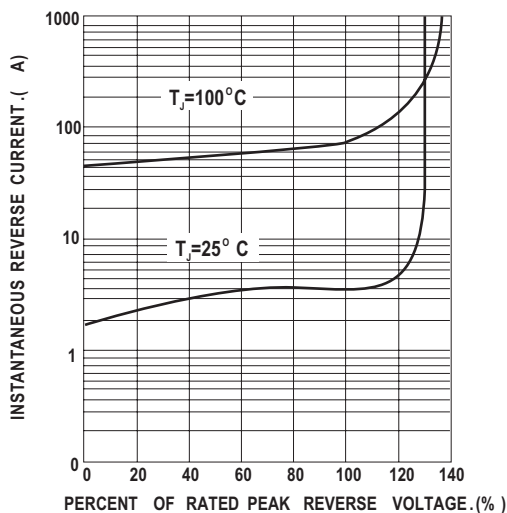


FIG . 4 -TYPICAL REVERSE CHARACTERISTICS

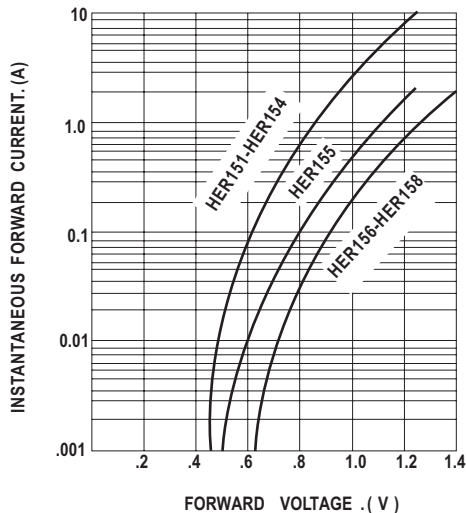


FIG . 5 - MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

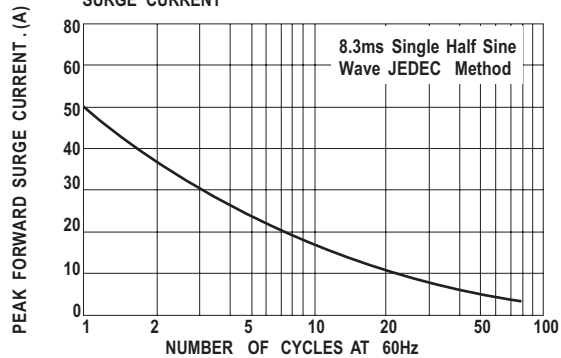


FIG . 6 -TYPICAL JUNCTION CAPACITANCE

