RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

EH2A THRU EH2J

SURFACE MOUNT GLASS PASSIVATED SUPER FAST SILICON RECTIFIER

VOLTAGE RANGE 50 to 600 Volts CURRENT 2.0 Amperes

FEATURES

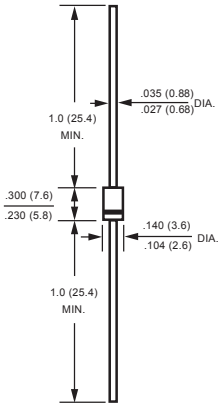
* Glass passivated device
* Ideal for surface mounted applications
* Low leakage current
* Metallurgically bonded construction
* Mounting position: Any

MECHANICAL DATA

* Epoxy : Device has UL flammability classification 94V-0



DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Resistive or inductive load.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	EH2A	EH2B	EH2C	EH2D	EH2E	EH2G	EH2J	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current at T_A = 55°C	I_O	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	75							Amps
Typical Current Square Time	I^2T	23.3							A^2S
Typical Thermal Resistance (Note 4)	$R_{\theta JA}$	75							°C/W
	$R_{\theta JL}$	20				25			
Typical Junction Capacitance (Note 2)	C_J	30				20			pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

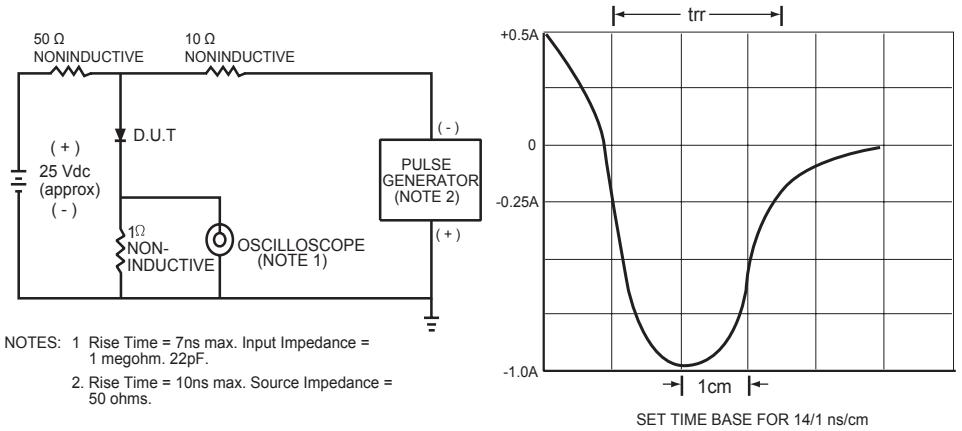
ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	EH2A	EH2B	EH2C	EH2D	EH2E	EH2G	EH2J	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V_F	0.95				1.25		1.70	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	IR	5.0							uAmps
	@T_A = 100°C		100							
Maximum Reverse Recovery Time (Note 1)		trr	35							nSec

NOTES : 1. Reverse Recovery Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts
3. "ROHS compliant"
4. Thermal Resistance : Mounted on PCB.

2021-06
REV:A

RATING AND CHARACTERISTICS CURVES (EH2A THRU EH2J)



NOTES: 1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.

2. Rise Time = 10ns max. Source Impedance = 50 ohms.

FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

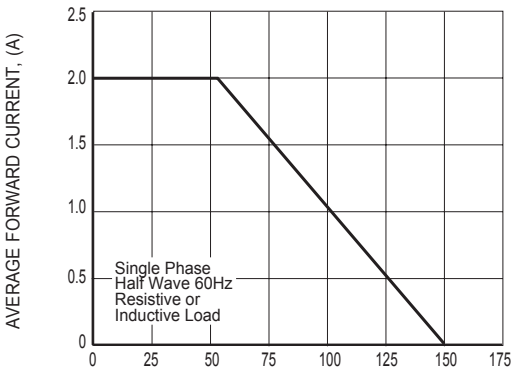


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

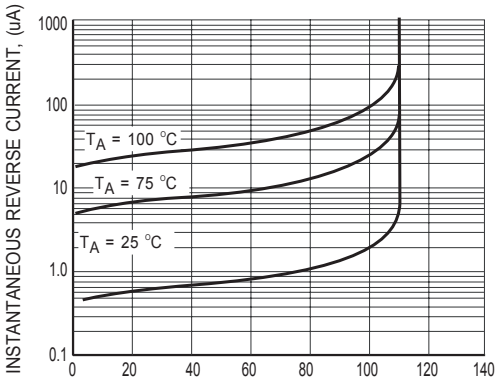


FIG.3 TYPICAL REVERSE CHARACTERISTICS

RATING AND CHARACTERISTICS CURVES (EH2A THRU EH2J)

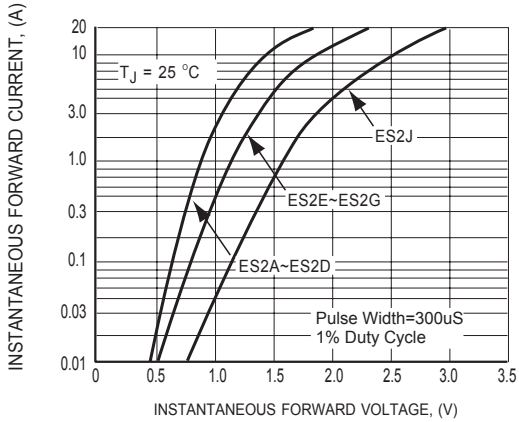


FIG.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

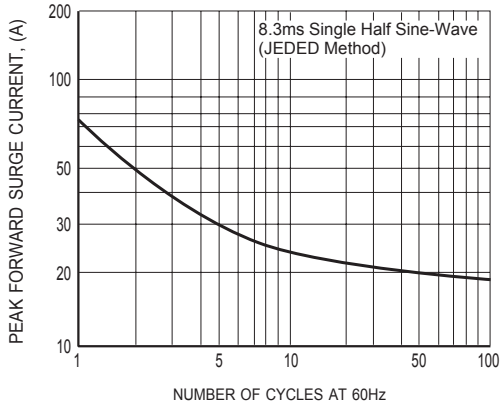


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

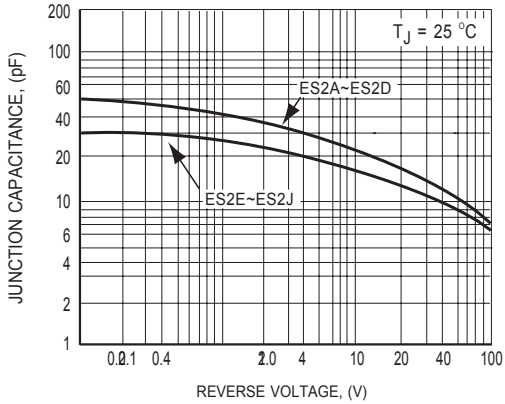


FIG.6 TYPICAL JUNCTION CAPACITANCE

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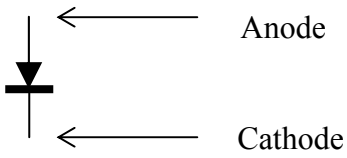
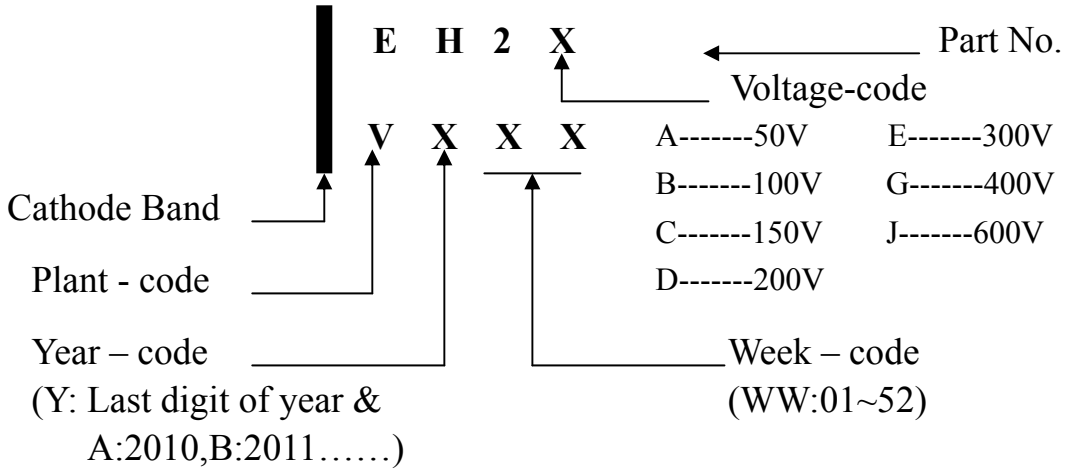
Attachment information about EH2X

1. Internal Circuit



2. Marking on the body



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Attachment information about EH2X

3. Items marked on the reel box and carton

3.1 On the reel (for –T & -W)

CUSTOMER
TYPE
QUANTITY
LOT NO.
Q.A.
REMARK

3.2 On the box (for –T & -W)

TYPE
QUANTITY
LOT NO.
Q.A.

3.3 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

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)
DO-15	-B	500	194*84*21	415*220*255	25,000	12.74

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-15	-T	4,000	4,000	5.0	52	330	355*350*335	16,000	10.05

AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-15	-F	1,500	5.0	52	255*73*100	400*268*225	15,000	8.8

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