ER3002PT / ER3004PT

ISOLATION SUPERFAST RECOVERY RECTIFIER

VOLTAGE 200 to 400 Volts **CURRENT** 30 Amperes

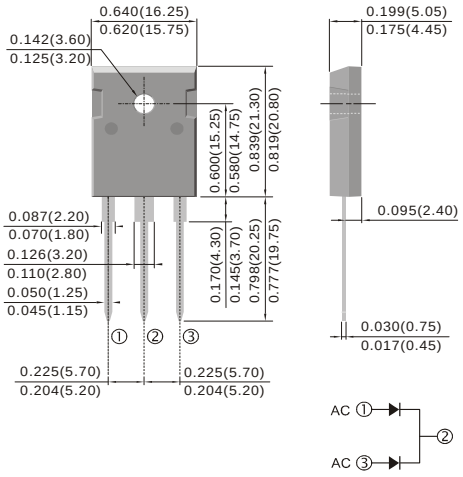
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltge, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-3P Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.2245 ounces, 6.367 grams.

TO-247AD / TO-3P Unit : inch(mm)



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICSS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	ER3002PT	ER3004PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	V
Maximum RMS Voltage	V_{RMS}	140	280	V
Maximum DC Blocking Voltage	V_{DC}	200	400	V
Maximum Average Forward Current	$I_{F(AV)}$	30		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300		A
Maximum Forward Voltage at 15A	V_F	0.95	1.3	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C T_J=125°C	I_R	1 50		μA
Maximum Reverse Recovery Time (Notes 2)	t_{rr}	35		ns
Typical Junction Capacitance (Notes 1)	C_J	140		pF
Typical Thermal Resistance (Notes 3)	$R_{\theta JC}$	2		°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150		°C

NOTES :

1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Recover to 0.25A.
3. Infinite heatsink.

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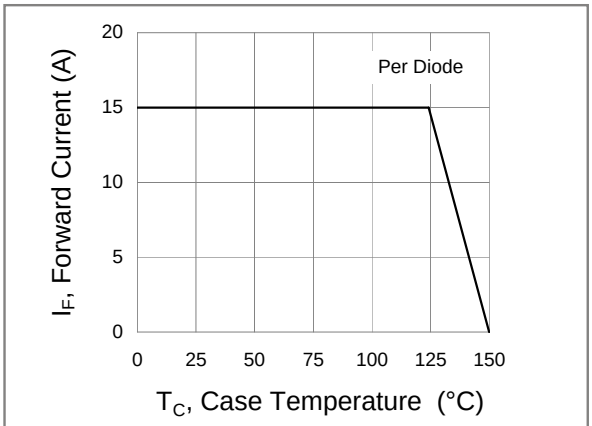


Fig.1 Forward Current Derating Curve

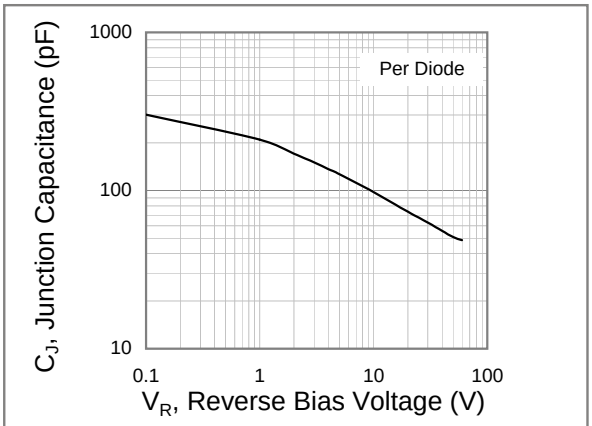


Fig.2 Typical Junction Capacitance

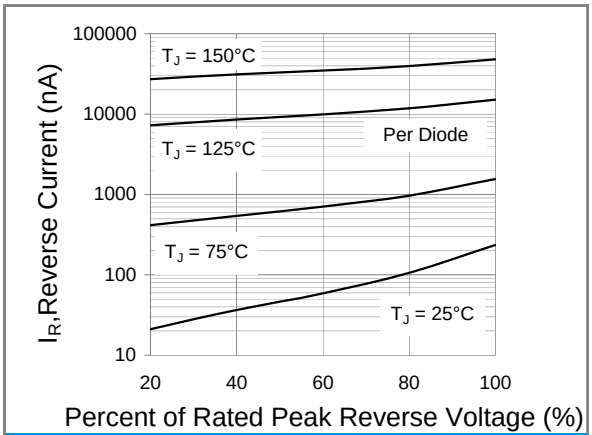


Fig.3 ER3002PT Typical Reverse Characteristics

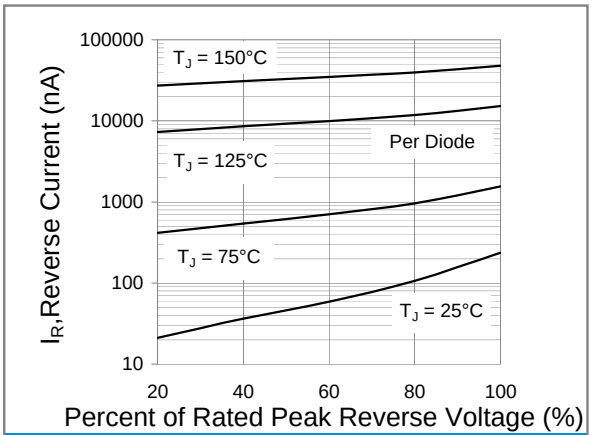


Fig.4 ER3004PT Typical Reverse Characteristics

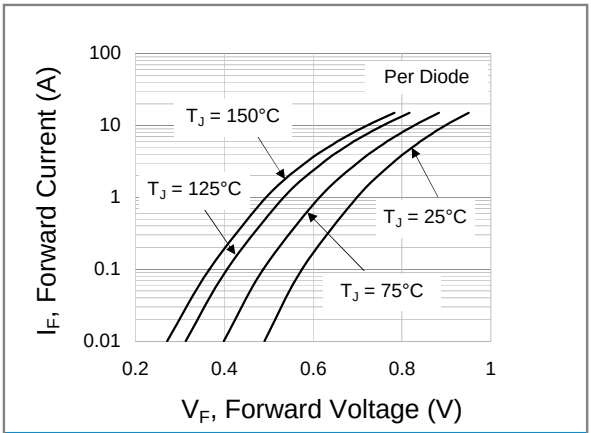


Fig.5 ER3002PT Typical Forward Characteristics

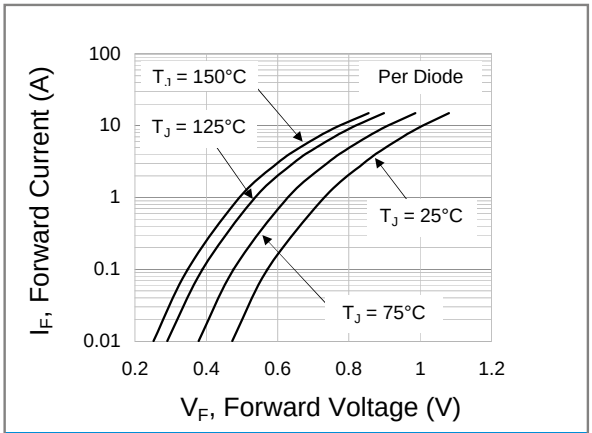


Fig.6 ER3004PT Typical Forward Characteristics

ER3002PT / ER3004PT

Part No_packing code_Version

ER3002PT_T0_00001

ER3002PT_T0_10001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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