



# SUPERFAST RECOVERY RECTIFIERS

Voltage

200 V

Current

3 A

#### **Features**

- Plastic package has Underwriters Laboratory.
   Flammability Classification 94V-O.
   Flame Retardant Epoxy Molding Compound.
- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std..(Halogen Free) (TO-252)

#### Mechanical Data

- Case: Molded plastic, TO-252, TO-251AB
- Terminals: Solderable per MIL-STD-750, Method 2026
- TO-252 Weight: 0.0104 ounces, 0.297 grams
- TO-251AB Weight: 0.0104 ounces, 0.297 grams
- Marking: Part number

### EDT302S TO-252



### EDT302T \ EDT302YT TO-251AB



## Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	Vrrm	200	V
Maximum rms voltage	VRMS	140	V
Maximum dc blocking voltage	VR	200	٧
Maximum average forward rectified current	<b>I</b> F(AV)	3	Α
Peak forward surge current: 8.3ms single half sine- wave superimposed on rated load	İFSM	65	А
Maximum forward voltage at 3A	VF	0.95	V
Maximum dc reverse current at rated dc blocking voltage	lR	1	μΑ
Typical junction capacitance  Measured at 1MHZ and applied V <sub>R</sub> =4 volts.	CJ	50	pF
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	Тѕтс	-55 to +150	°C





Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

PARAMET	ER	SYMBOL	LIMIT	UNIT
Maximum reverse recovery time	(Note 3)	Trr	25	ns
Typical thermal resistance	TO-252 (Note 1) TO-251AB (Note 2)	$R_{ hetaJC}$	14 5	°C/W

Note: 1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area

- 2. Device mounted on a infinite heatsink, then measured the center of the marking side.
- 3. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=-1A, Recover to -0.25A.

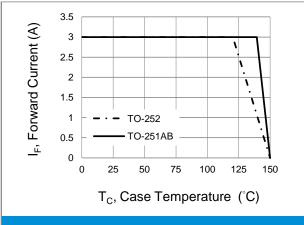
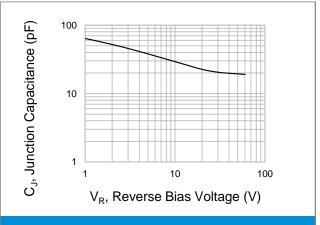
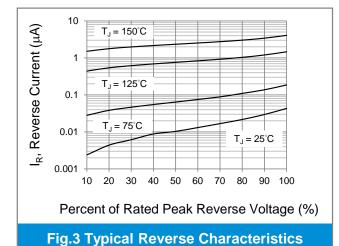


Fig.1 Forward Current Derating Curve



**Fig.2 Typical Junction Capacitance** 



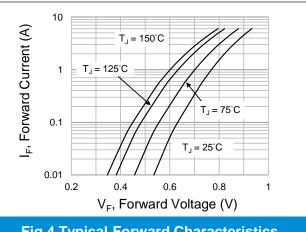


Fig.4 Typical Forward Characteristics

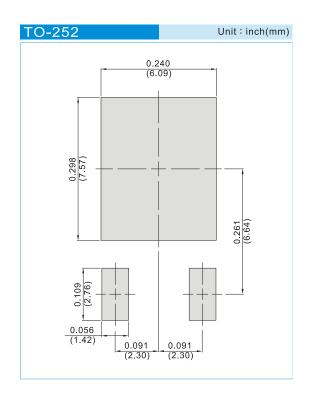




## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing type	Marking	Version
EDT302S_L2_00001	TO-252	3K pcs / 13" reel	EDT302S	Halogen free
EDT302T_T0_10001	TO-251AB	80 pcs / Tube	EDT302T	RoHS
EDT302YT_T0_10001	TO-251AB	80 pcs / Tube	EDT302YT	RoHS

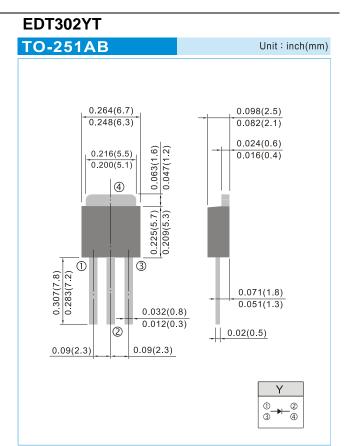
## **MOUNTING PAD LAYOUT**



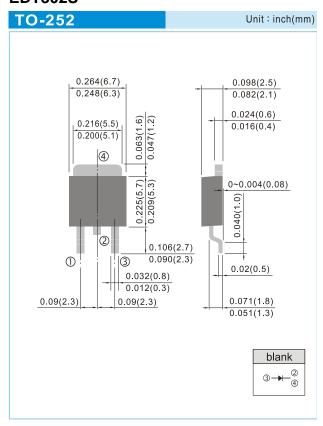




### **EDT302T TO-251AB** Unit: inch(mm) 0.264(6.7) 0.098(2.5) 0.248(6.3) 0.082(2.1) 0.024(0.6) 0.063(1.6) 0.216(5.5) 0.016(0.4) 4 0.225(5.7) 1 3 0.307(7.8) 0.071(1.8) 0.051(1.3) 0.032(0.8) 0.012(0.3) 0.02(0.5) 0.09(2.3) 0.09(2.3) blank 2



#### **EDT302S**







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