



ED502S~ED506S

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 200 to 600 Volt **CURRENT** 5 Ampere

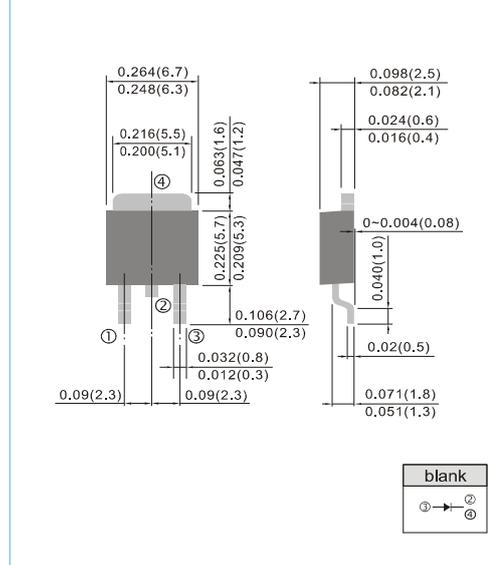
TO-252 Unit : inch(mm)

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in accordance with RoHS and REACH.
- Green molding compound as per IEC61249 Std. (Halogen Free)

MECHANICAL DATA

- Case: Molded plastic, TO-252
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ED502S	ED503S	ED504S	ED506S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	300	400	600	V
Maximum Average Forward Current at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	5				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	75				A
Maximum Forward Voltage at 5A DC	V_F	0.95	1.25	1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_R		1 300			μA
Maximum Reverse Recovery Time	t_{rr}		35			nS
Typical Junction Capacitance	C_J		45			pF
Typical Thermal Resistance	$R_{\theta JA}$		9			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}		-55 to +150			$^\circ\text{C}$

NOTES:

1. Thermal Resistance Junction to Ambient .



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RATING AND CHARACTERISTIC CURVES

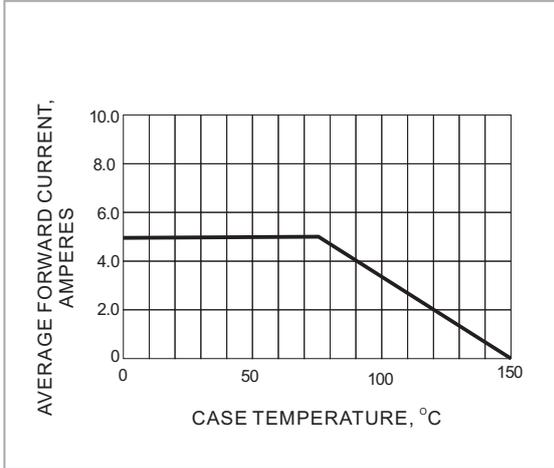


Fig. 1-FORWARD CURRENT DERATING CURVE

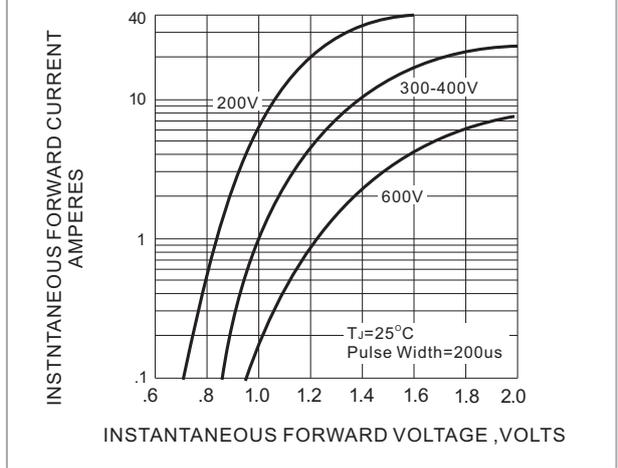


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

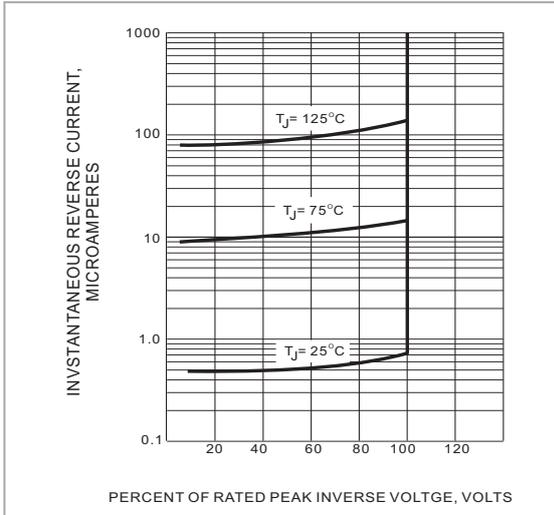


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

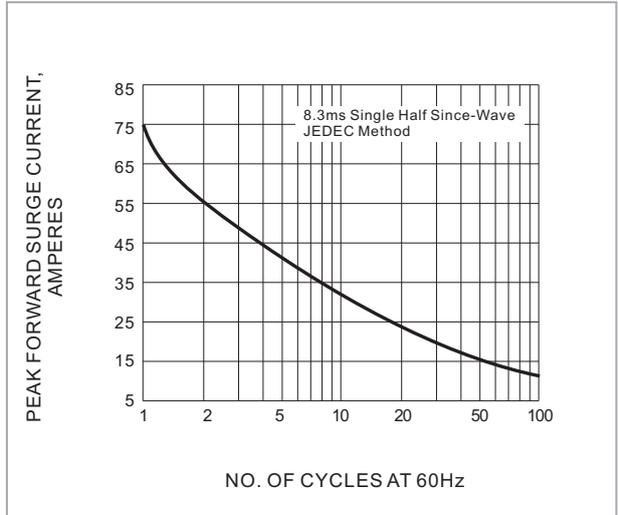


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

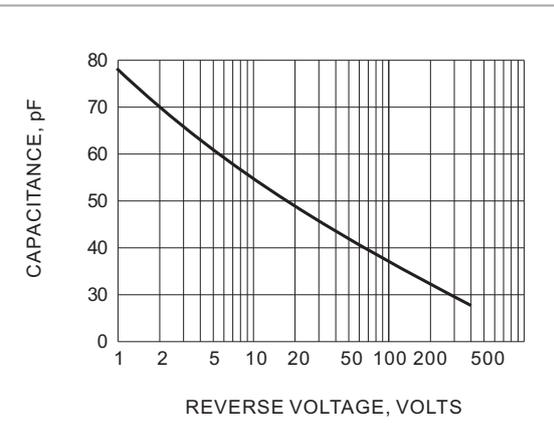


Fig. 5-TYPICAL JUNCTION CAPACITANCE

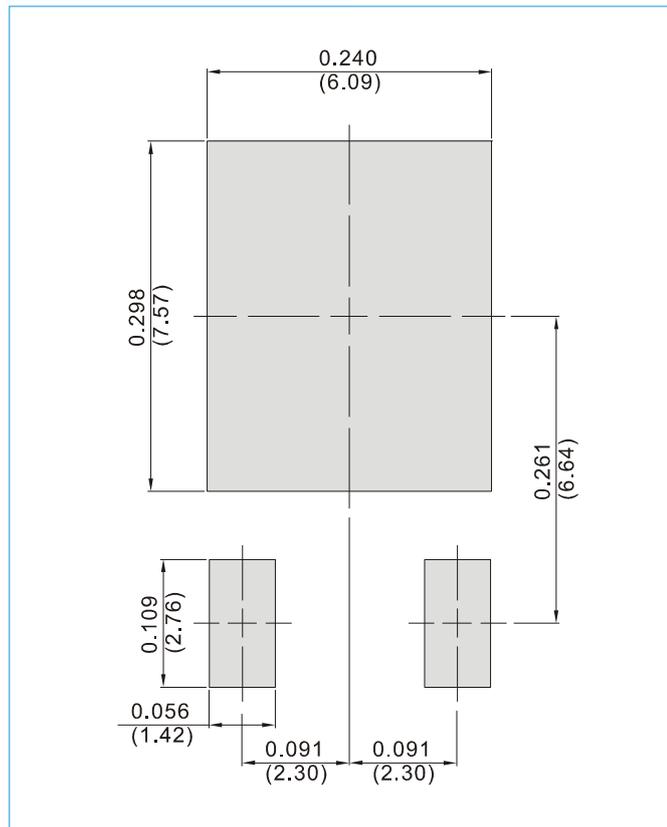


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MOUNTING PAD LAYOUT

TO-252

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 3K per 13" plastic Reel



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Part No_packing code_Version

ED502S_L2_00001

ED502S_S2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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