

ED602CS~ED606CS

SUPERFAST RECOVERY RECTIFIERS

Voltage

200~600 V

Current

6 A

Features

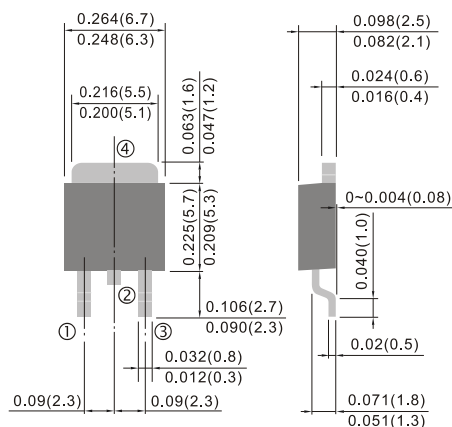
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Exceeds environmental standards of MIL-S-19500/228
- Hermetically sealed.
- Low leakage
- High surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std..(Halogen Free)

Mechanical Data

- Case: TO-252 Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking
- Approx. Weight: 0.0104 ounces, 0.297 grams
- Marking: Part number

TO-252

Unit : inch(mm)



Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER		SYMBOL	ED602CS	ED603CS	ED604CS	ED606CS	UNIT
Maximum repetitive 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 _R	200	300	400	600	V
Maximum average forward rectified current		I _{F(AV)}	6				A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	75				A
Maximum forward voltage at 3A per diode		V _F	0.95	1.3		1.7	V
Maximum dc reverse current	T _J =25 °C	I _R	1				μA
at rated dc blocking voltage	T _J =100 °C		300				
Maximum reverse recovery time (Note 2)		T _{RR}	35				nS
Typical thermal resistance (Note 3)		R _{ΘJC}	9				°C/W
Operating junction and storage temperature range		T _J , T _{STG}	-55 to +150				°C

NOTES :

1. Pulse Test with $PW=300\ \mu\text{sec}$, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
3. Mounted on P.C. Board with 14mm^2 (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

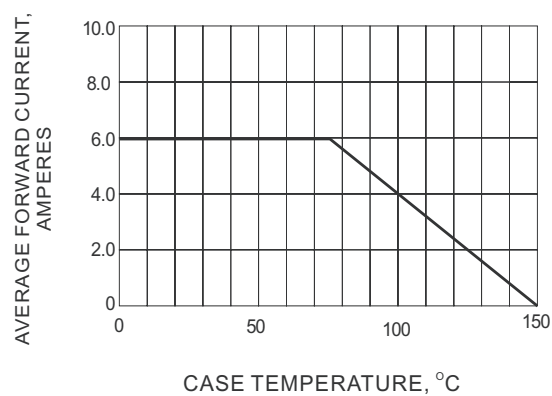


Fig.1- FORWARD CURRENT DERATING CURVE

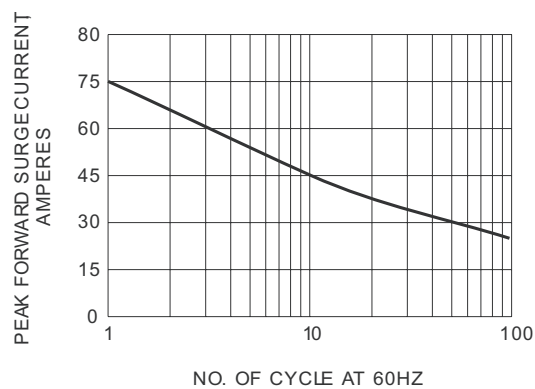


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

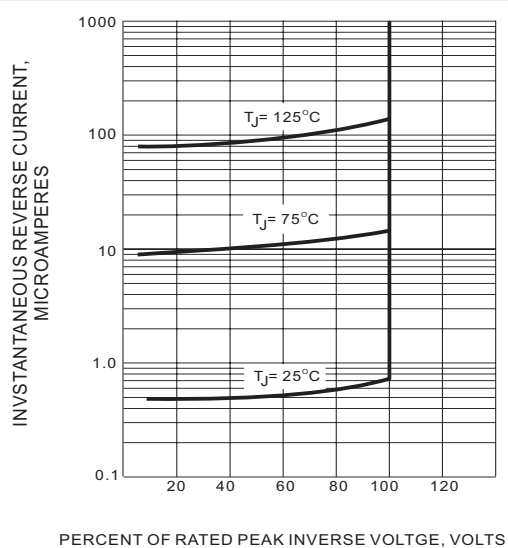


Fig.3- TYPICAL REVERSE CHARACTERISTICS

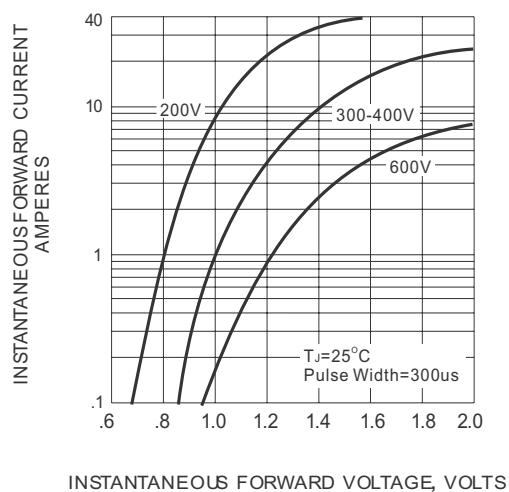
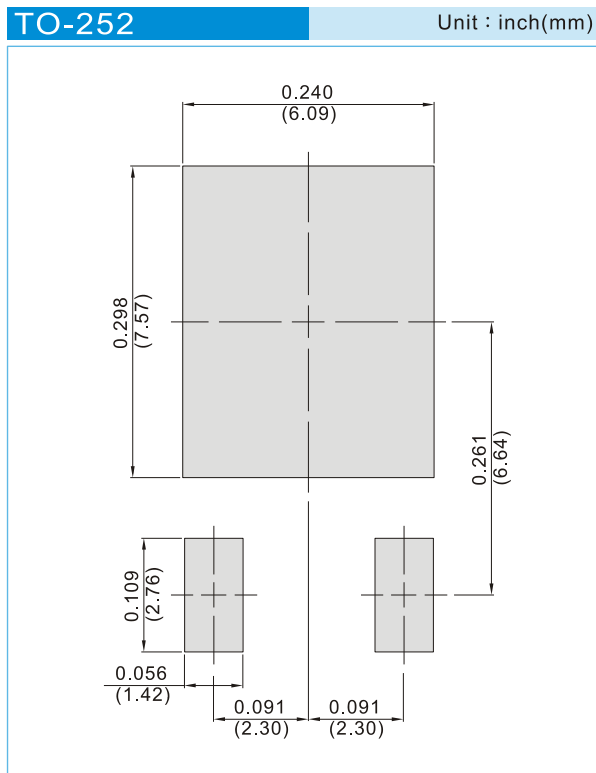


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

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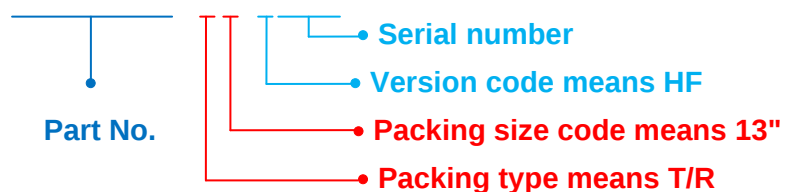
Part No_packing code_Version

ED602CS_L2_00001

ED602CS_S2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
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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