



### SUPERFAST RECOVERY RECTIFIERS

Voltage

200~600 V

Current

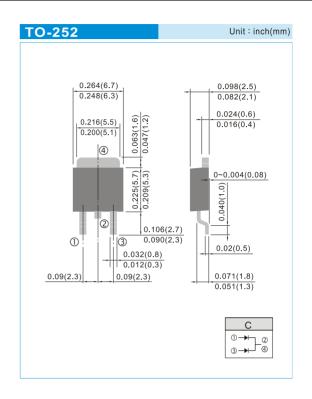
6 A

#### **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



## Maximum Ratings (T<sub>A</sub>=25°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	٧
Maximum dc blocking voltage		$V_R$	200	300	400	600	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	6				А
Peak forward surge current : 8.3ms single half sine- wave superimposed on rated load		I <sub>FSM</sub>	75			А	
Maximum forward voltage at 3A per diode		$V_{F}$	0.95	1.3		1.7	V
Maximum dc reverse current	T <sub>J</sub> =25 °C	I <sub>R</sub>		μА			
at rated dc blocking voltage	T <sub>J</sub> =100 °C	IR	300				
Maximum reverse recovery time (Note 2)		$T_RR$	35				nS
Typical thermal resistance (Note 3)		R <sub>⊕JC</sub>	9				°C/W
Operating junction and storage temperature range		$T_J, T_{STG}$	-55 to +150				°C

#### NOTES:

- 1. Pulse Test with PW=300  $\mu sec$ , 2% Duty Cycle.
- 2. Reverse Recovery Tset Conditions:I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>rr</sub>=0.25A
- 3. Mounted on P.C. Board with 14mm<sup>2</sup> (0.013mm thick) copper pad areas.





#### RATING AND CHARACTERISTIC CURVES

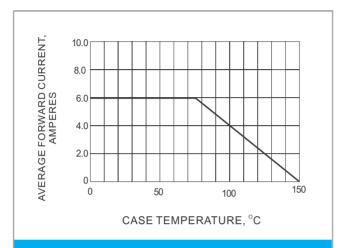


Fig.1-FORWARD CURRENT DERATING CURVE

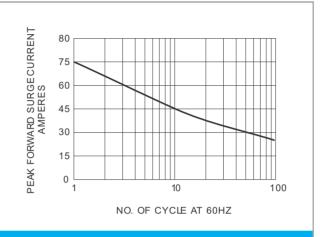


Fig.2 MAXIMUM NON-REPETITEV SURGE CURRENT

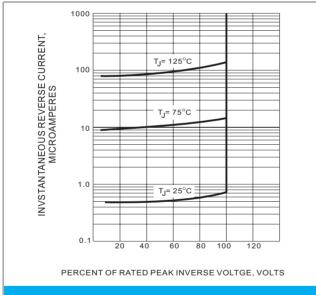


Fig.3-TYPICAL REVERSE CHARACTERISTICS

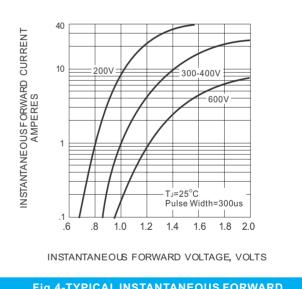
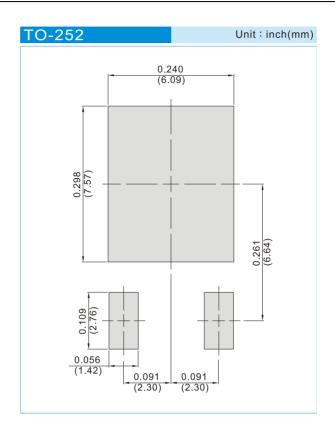


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTREISTICS





### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

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

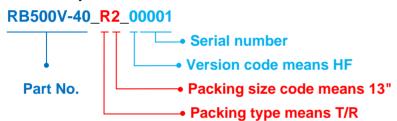




Part No\_packing code\_Version

ED602CS\_L2\_00001 ED602CS\_S2\_00001

### For example:



Packing Code XX					Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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)	В	13"	2					
Tube Packing (T/P)	Т	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					





#### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers
  are responsible in comprehending the suitable use in particular applications. Panjit International Inc.
  makes no representation or warranty that such applications will be suitable for the specified use
  without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Panjit:

ED602CS\_L2\_00001 ED602CS\_S2\_00001