



# ED602CS~ED606CS

## SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 200 to 600 Volts **CURRENT** 6.0 Amperes

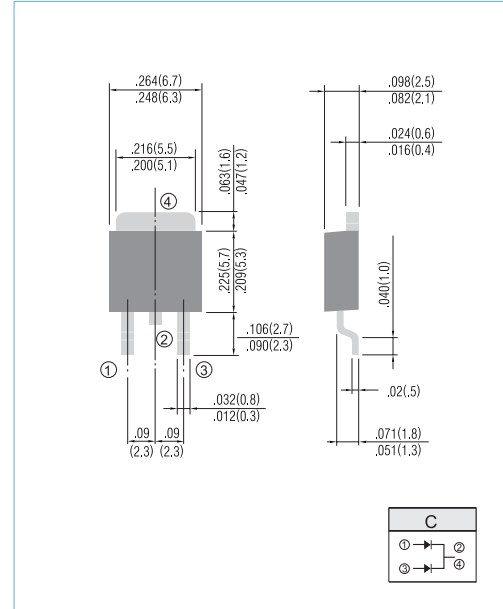
TO-252 Unit: inch ( mm )

### 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.
- In compliance with EU RoHS 2002/95/EC directives

### 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	ED602CS	ED603CS	ED604CS	ED606CS	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 $T_c=75^\circ\text{C}$	$I_{F(AV)}$	6.0				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	75				A
Maximum Forward Voltage at 3.0A (Note 1)	$V_F$	0.95	1.3	1.7		V
Maximum DC Reverse Current $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_j=100^\circ\text{C}$	$I_R$	1.0 300				$\mu\text{A}$
Maximum Reverse Recovery Time (Note 2)	$t_{rr}$	35				ns
Typical thermal Resistance (Note 3)	$R_{\theta JC}$	9.0				$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150				$^\circ\text{C}$

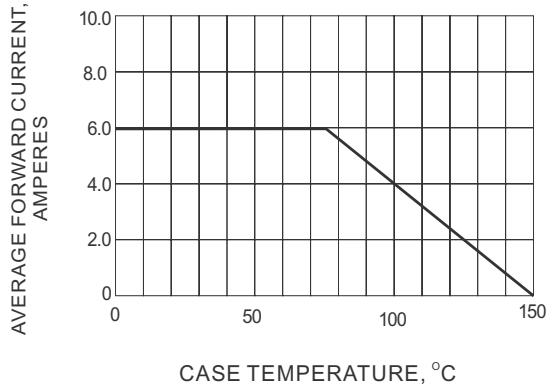
**NOTES:**

1. Pulse Test with PW=300 usec, 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 14mm2 (.013mm thick) copper pad areas.

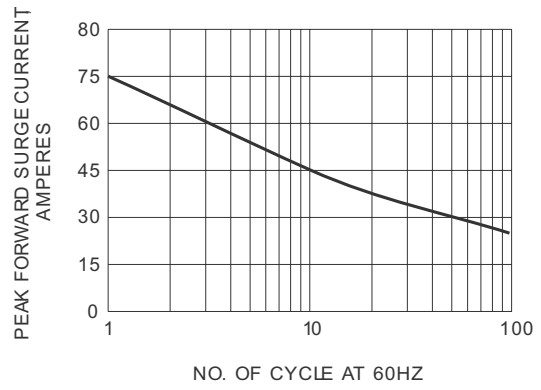


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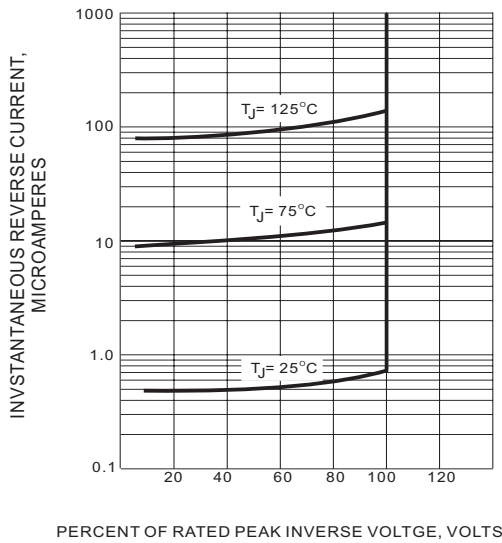
## RATING AND CHARACTERISTIC CURVES



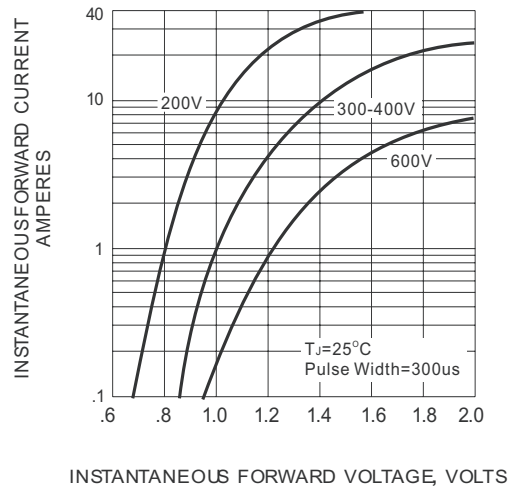
**Fig. 1- FORWARD CURRENT DERATING CURVE**



**Fig. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig. 3- TYPICAL REVERSE CHARACTERISTICS**

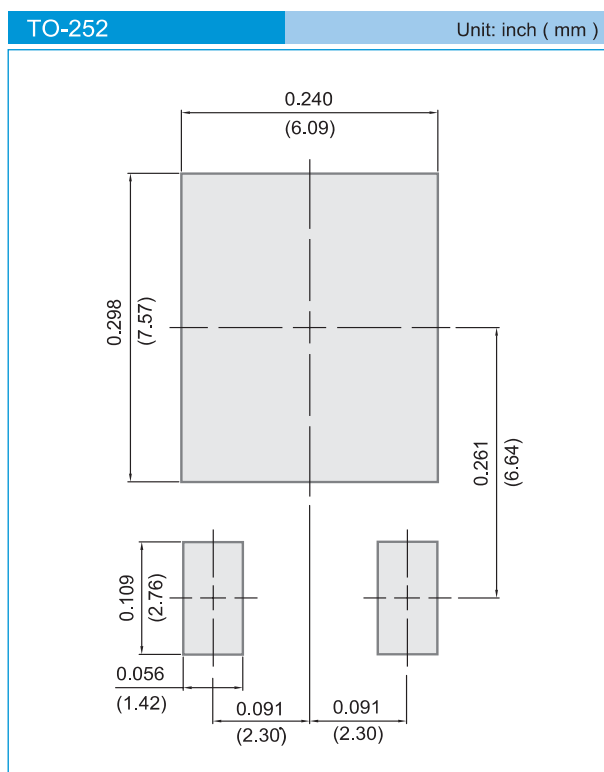


**Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

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