



# DATA SHEET

## ED302S~ED306S

### SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 200 to 600 Volts **CURRENT** 3.0 Amperes

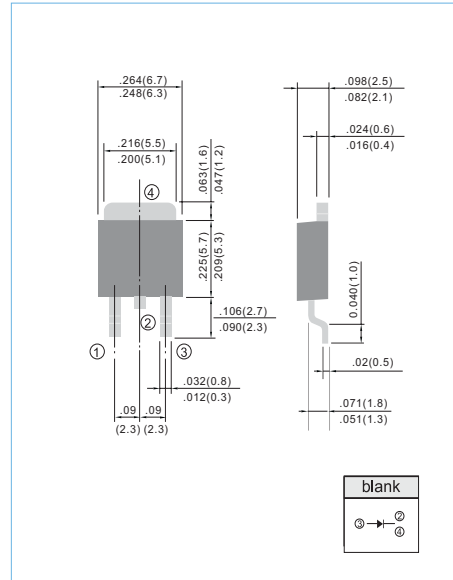
**TO-252 / DPAK** Unit : inch (mm)

#### 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.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, TO-251AB  
 Terminals: Axial leads, solderable to MIL-STD-202G, Method 208  
 Polarity: As marking  
 Weight: 0.015 ounces, 0.4grams.



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

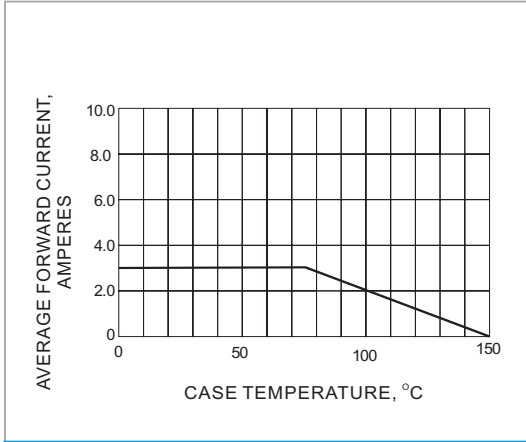
PARAMETER	SYMBOL	ED302S	ED303S	ED304S	ED306S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	300	400	600	V
Maximum Average Forward Current .375" (9.5mm) lead length at T <sub>A</sub> =75°C	I <sub>AV</sub>	3.0				A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	75				A
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	0.95	1.25		1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=125°C	I <sub>R</sub>	5.0 300				μA
Maximum Reverse Recovery Time	T <sub>rr</sub>	35				nS
Typical Junction capacitance	C <sub>J</sub>	45				pF
Typical Thermal Resistance	R <sub>θJA</sub>	25				°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-50 TO +125				°C

NOTES:

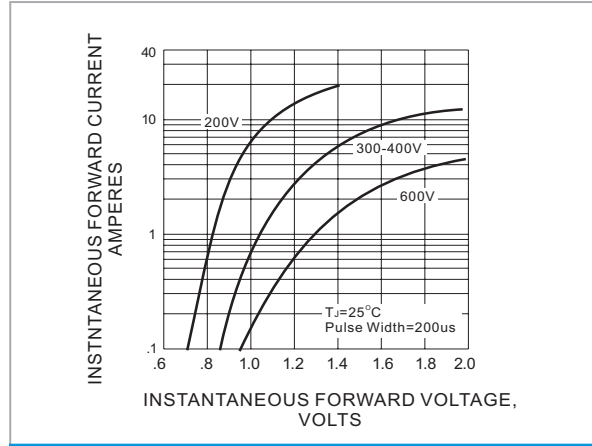
1. Thermal Resistance Junction to Ambient .



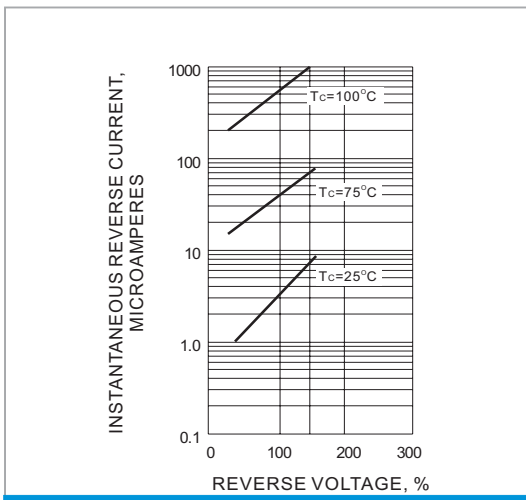
**RATING AND CHARACTERISTIC CURVES**



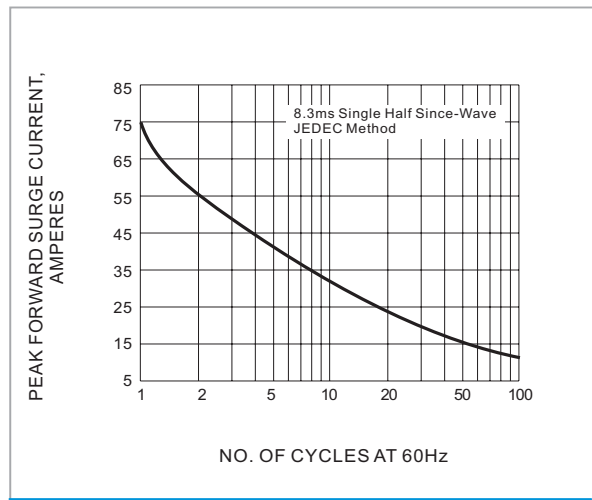
**Fig.1-FORWARD CURRENT DERATING CURVE**



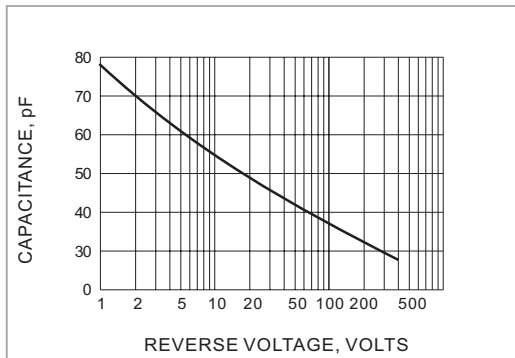
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3-TYPICAL REVERSE CHARACTERISTICS**



**Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig.5-TYPICAL JUNCTION CAPACITANCE**