



DATA SHEET

ED302S~ED306S

SUPERFAST RECOVERY RECTIFIERS

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

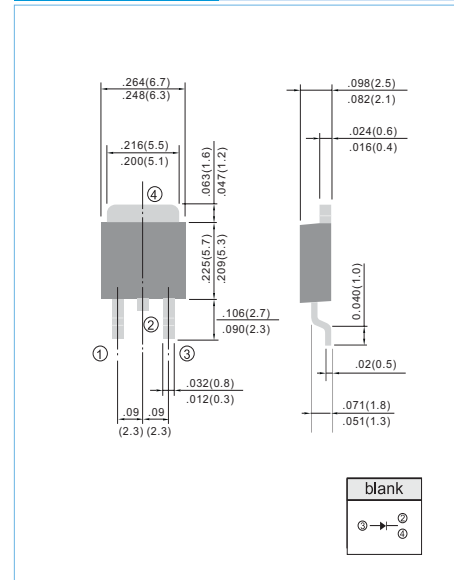
TO-252 / DPAK Unit : inch (mm)

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 _{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 .375" (9.5mm) lead length at T _A =75°C	I _{AV}	3.0				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 DC	V _F	0.95	1.25		1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=125°C	I _R	5.0 300				μA
Maximum Reverse Recovery Time	T _{rr}	35				nS
Typical Junction capacitance	C _J	45				pF
Typical Thermal Resistance	R _{θJA}	25				°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 TO +125				°C

NOTES:

1. Thermal Resistance Junction to Ambient .



RATING AND CHARACTERISTIC CURVES

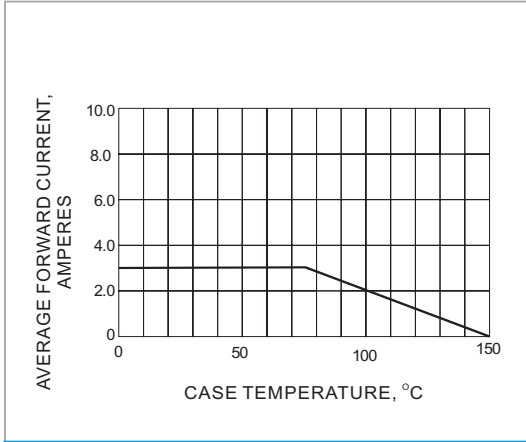


Fig.1-FORWARD CURRENT DERATING CURVE

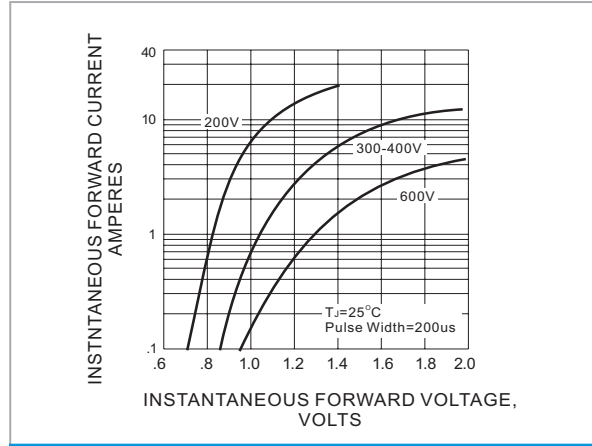


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

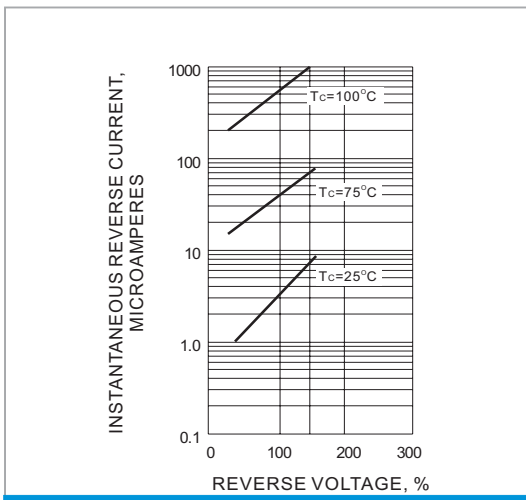


Fig.3-TYPICAL REVERSE CHARACTERISTICS

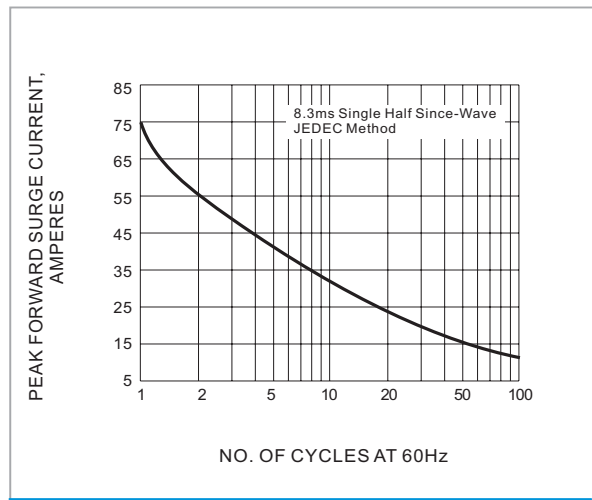


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

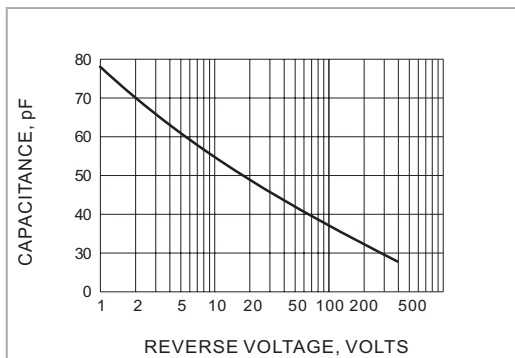


Fig.5-TYPICAL JUNCTION CAPACITANCE