

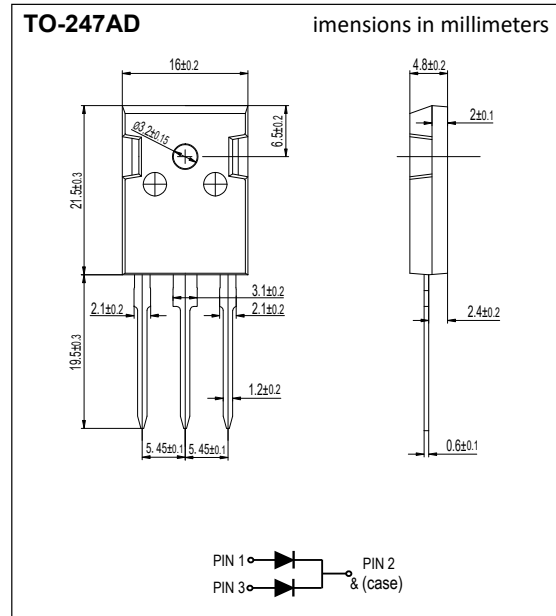
DSEK30P series

Feaures

- Glass passivated chip junctions
- High Speed recovery time for switching mode application
- High Forward Surge Capability
- Low Reverse Current
- Lead free in compliance with EU RoHS 2011/65/EU directive

Mechanical Data

- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: 5.85 grams



Maximum Ratings & Electrical Characteristics

Rating	Symbol	DSEK3002P	DSEK3004P	DSEK3006P	Unit
Maximum Repetitive Reverse Voltage	V _{RRM}	200	400	600	V
Maximum RMS voltage	V _{RMS}	140	280	420	V
DC Blocking Voltage	V _{DC}	200	400	600	V
Average Forward Current per device per diode	I _F	30 15			A
Max. Forward Surge Current ,8.3ms single half sine-wave superimposed on rated load	I _{FSM}	400			A
Typical Forward Voltage at I _F =15A	V _F	1.05	1.35	1.85	V
Max. DC Reverse Current at T _A =25°C Rated DC Blocking Voltage T _A =125°C	I _R	5 250			μA
Typical Reverse Recovery Time (Note 1)	T _{RR}	35			nS
Typical Thermal Resistance(Note 2)	R _{θ-JC}	1.5			°C/W
Operating Junction Temperature Range	T _J	-55 to +150			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

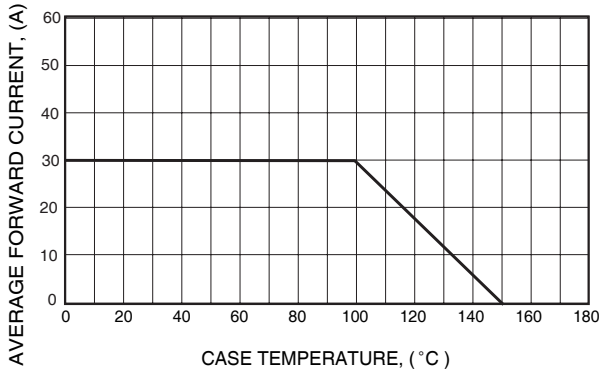


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

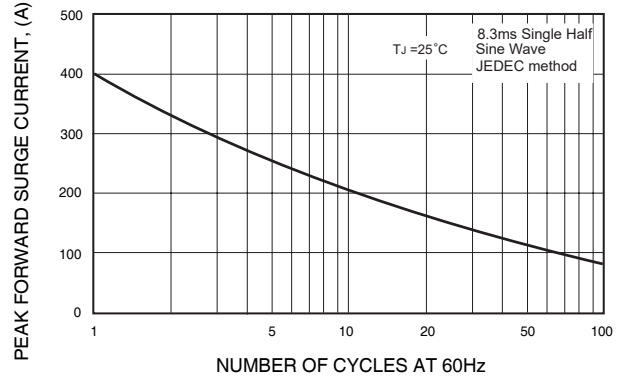


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

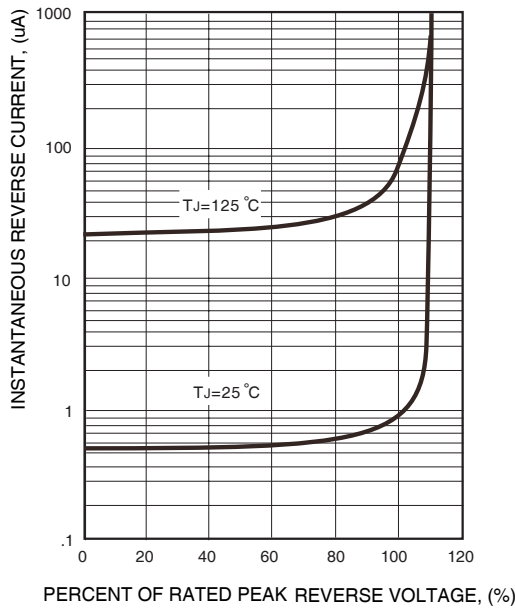
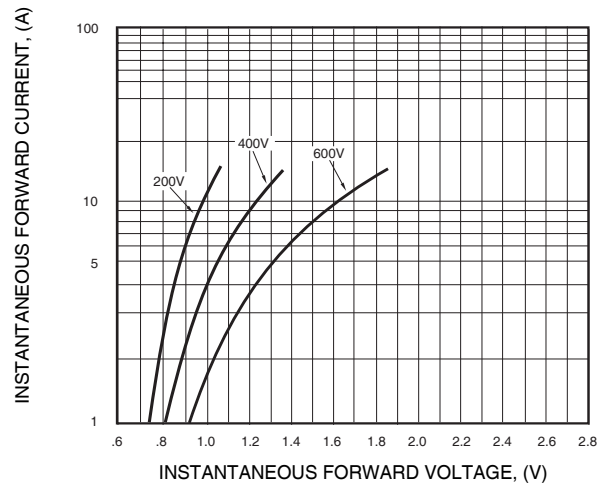


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





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