

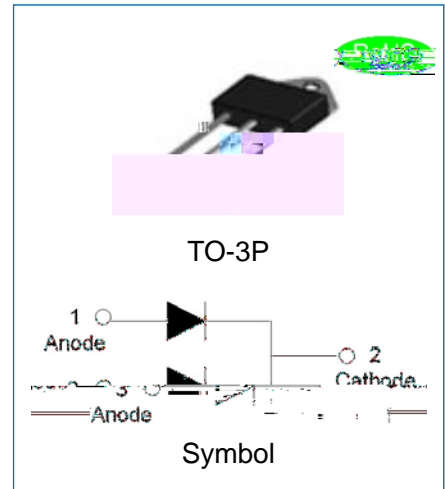


## JEER6006ZCT EPI SUPERFAST SOFT RECOVERY RECTIFIER

Rev.1.2

### DESCRIPTION

- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ Lead free in comply with EU RoHS 2011/65/EU directives
- ✧ Low reverse leakage current
- ✧ Superfast recovery time and soft recovery characteristics
- ✧ Low recovery loss



### MECHANICAL DATA

- ✧ Case: TO-3P molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Internally constructed isolated package is offered for ease of heat sinking with highest isolation voltage
- ✧ Weight:4.805gram

### ABSOLUTE MAXIMUM RATING (Rating at 25 °C case temperature unless otherwise specified.)

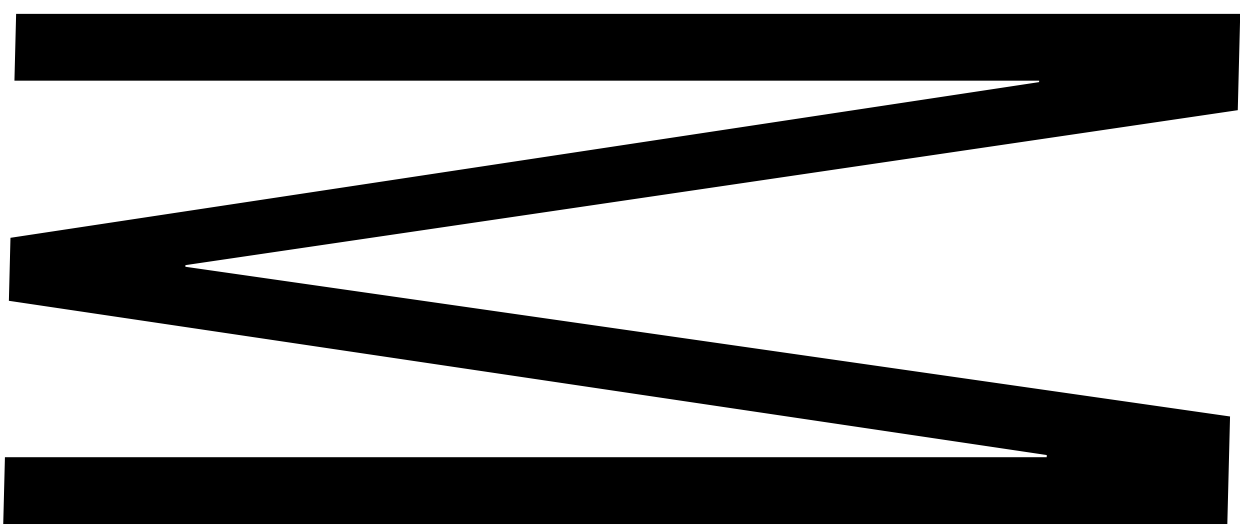
Parameter	Symbol	JEER6006ZCT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum DC blocking voltage	$V_{DC}$	600	V
Average forward current at $T_C=100$	$I_{F(AV)}$	60	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load(per diode)	$I_{FSM}$	180	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load(per diode)		200	
Junction temperature and storage temperature range	$T_j, T_{stg}$	-55 to +150	

### ISOLATION CHARACTERISTICS

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
$V_{isol(RMS)}$	RMS isolation voltage	50Hz f 60Hz;RH 65%;from all pins to external heatsink; sinusoidal waveform; clean and dust free	-	-	2500	V
$C_{isol}$	Isolation capacitance	from cathode to external heatsink	-	10	-	pF

**ELECTRICAL CHARACTERISTICS**(Rating at 25 case temperature unless otherwise specified.)

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=30A, T_j=25$	$V_F$	-	1.65	2.0	V
	$I_F=30A, T_j=150$		-	1.35	-	
Reverse current	$V_R=600V, T_j=25$	$I_R$	-	-	5	$\mu A$
	$V_R=600V, T_j=150$		-	-	400	
Reverse recovery time	$I_F=30A, V_R=30V, di/dt=200A/\mu s, T_j=25$	$t_{rr}$	-	41	90	ns



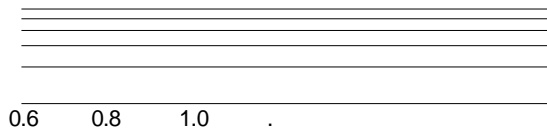


CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

FIG.2: Typical reverse characteristics

Instantaneous forward current (A)




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