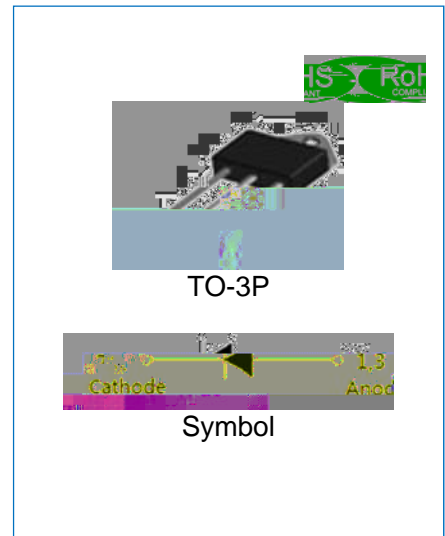




JECR6006ZW
EP

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
 Ultrafast recovery time and soft recovery characteristics
 Low recovery loss
 Active PFC in air conditioner, S.M.P.S Power Factor Correction (PFC) and half bridge/full-bridge switched-mode power supplies



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

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

Parameter	Symbol	JECR6006ZW	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum DC blocking voltage	V_{DC}	600	V

Maximum average forward current at $T_c=70^\circ\text{C}$ S_{ax} u B_{ax} k d \bar{u} r e n o r r e n

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Junction temperature and storage temperature range T_j, T_s A

					A U I	I b
$V_{isol(RMS)}$	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	$I_F=60A, T_j=25$	V_F	-	2	2.4	V
	$I_F=60A, T_j=150$		-	1.45	2	
Reverse current	$V_R=600V, T_j=25$	I_R	-	-	5	μA
	$V_R=600V, T_j=150$		-	-	500	
Reverse recovery time	$I_F=1A, V_R=30V,$ $di/dt=50A/\mu s, T_j=25$	t_{rr}	-	-	50	ns
	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=25$		-	45	-	
	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=125$		-	80	-	
Peak reverse recovery current	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=25$	I_{RM}	-	3.9	-	A
	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=125$		-	12	-	
Reverse charge	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=25$	Q_r	-	100	-	nC
	$I_F=60A, V_R=400V,$ $di/dt=200A/\mu s, T_j=125$		-	500	-	

THERMAL RESISTANCES

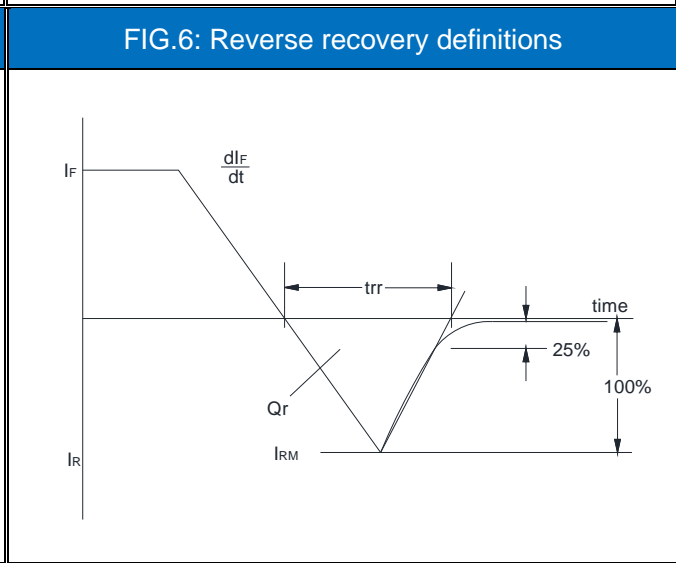
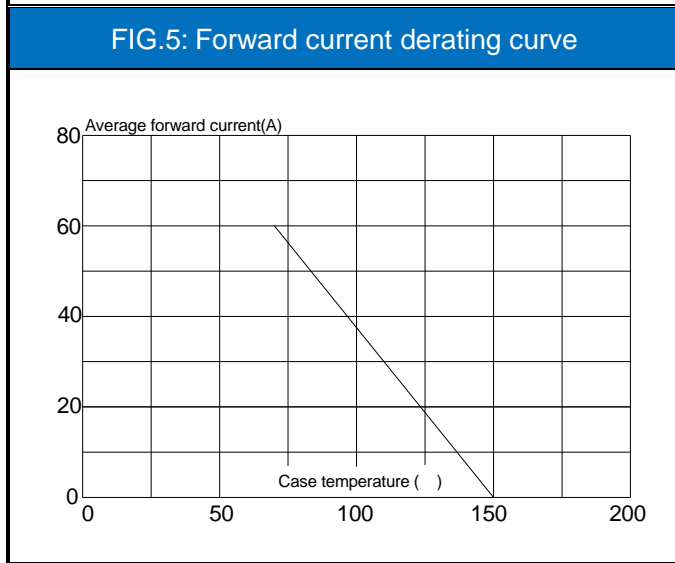
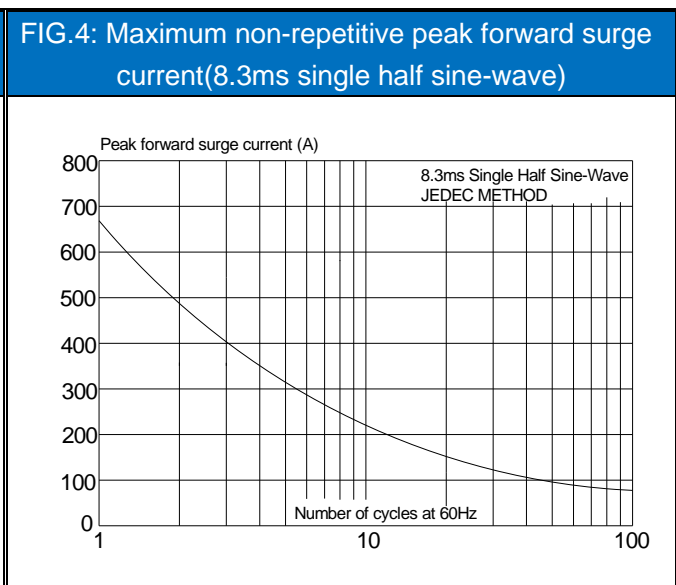
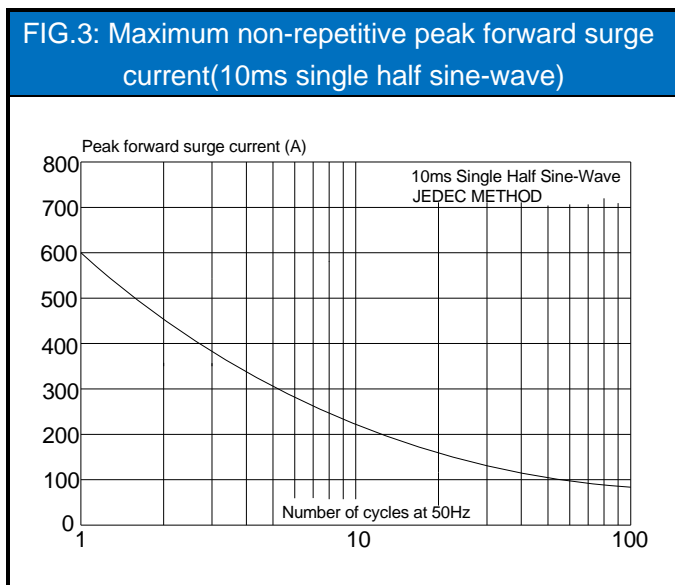
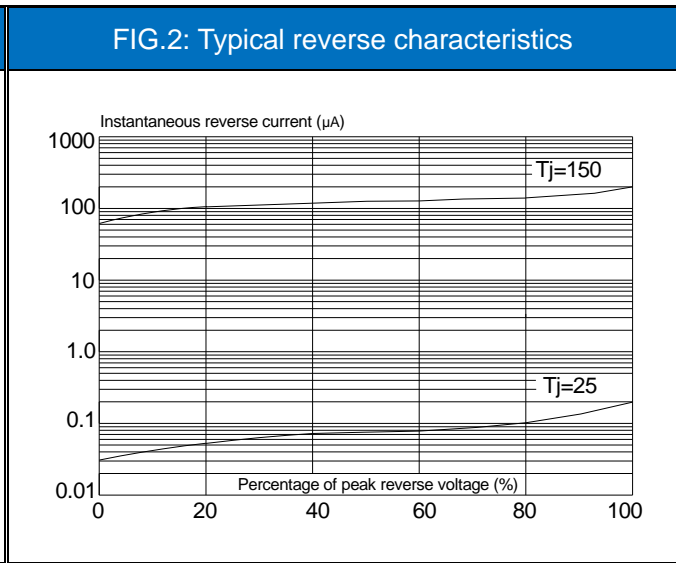
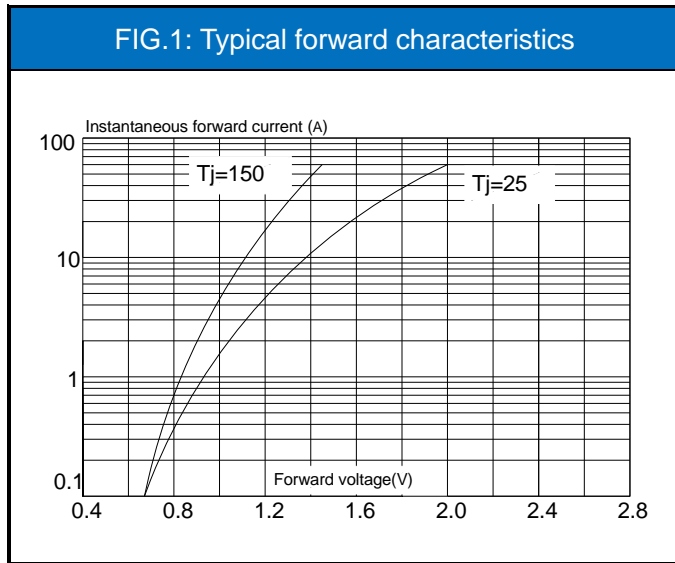
Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-c)}$	Thermal resistance from junction to case	-	1.1	-	$/W$

MARKING

ECR

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CHARACTERISTICS CURVE





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