

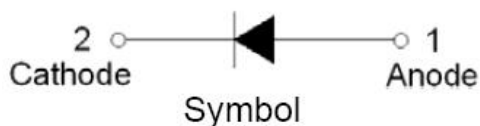
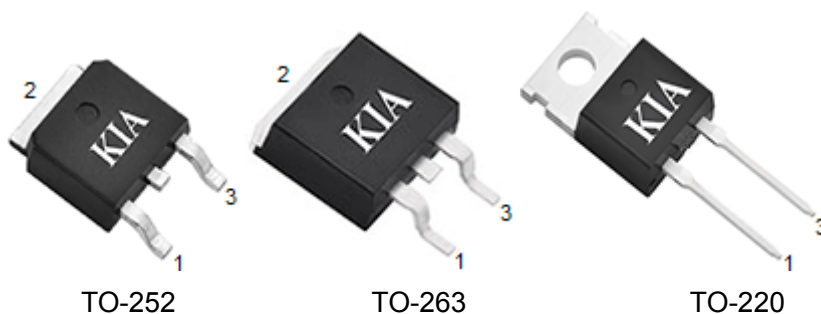
1. Description

- 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

2. Mechanical Characteristics

- Case: epoxy, molded
- Terminals: Solder plated, solderable per J-STD-002

3. Pin configuration



Pin		Function
TO-220	TO-252/TO-263	
1	1	Cathode
--	2	Cathode
3	3	Anode

4. Ordering Information

Part Number	Package	Brand
KIA15TB65DD	TO-252	KIA
KIA15TB65DB	TO-263	KIA
KIA15TB65DP	TO-220-2L	KIA

5. Thermal characteristics

Parameter	Symbol	Rating	Unit
Maximum thermal resistance, junction-to-case	$R_{\theta JC}$	1.3	°C/W

6. Maximum ratings

(Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Rating	Units
Maximum repetitive peak reverse voltage	V_{RRM}	650	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	650	V
Average forward current at TC=100°C	$I_{F(AV)}$	15	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200	A
Junction temperature and storage temperature range	T_J, T_{stg}	-55 to +150	°C

7. Electrical characteristics

(Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Conditions	Rating			Unit
			Min	Typ	Max	
Forward Voltage	V_F	$I_F=15A, T_J=25^{\circ}C$	-	-	1.7	V
DC reverse current at rated DC blocking voltage	I_R	$T_J=25^{\circ}C$	-	-	5	μA
		$T_J=150^{\circ}C$	-	-	300	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A, I_R=1.0A,$ $I_{RR}=0.25A$	-	-	35	ns

8. Characteristics curve

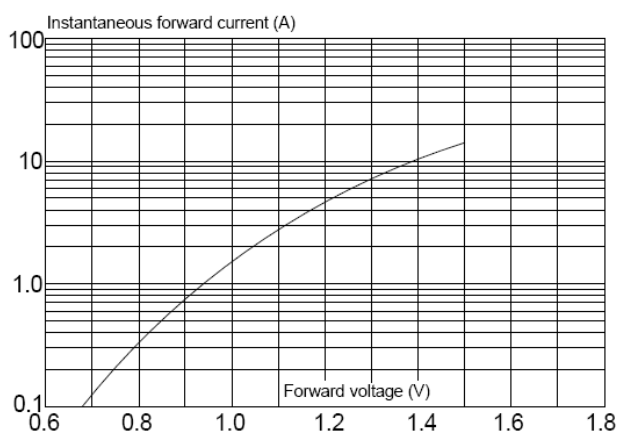


FIG.1: Typical forward characteristics

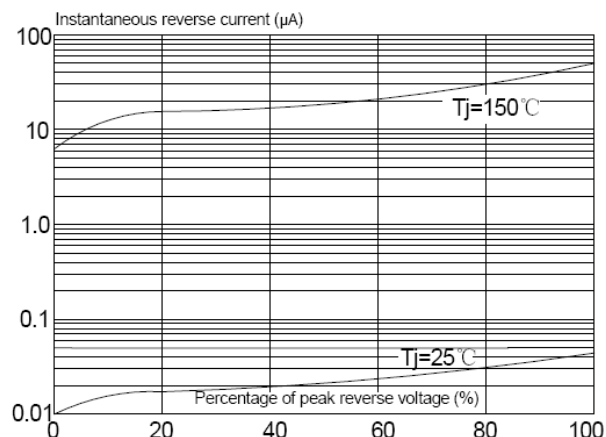


FIG.2: Typical reverse characteristics

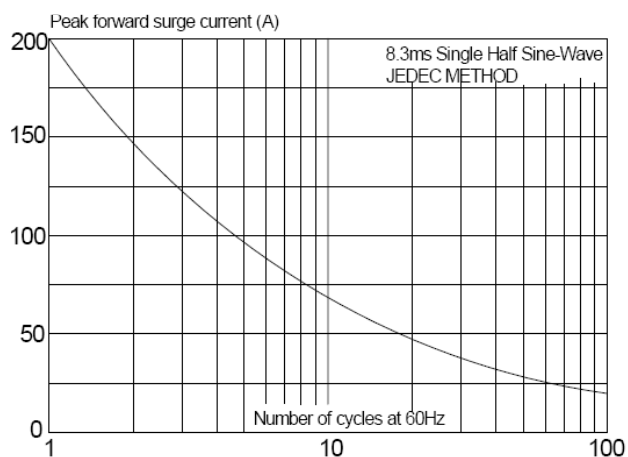


FIG.3: Maximum non-repetitive peak forward surge current

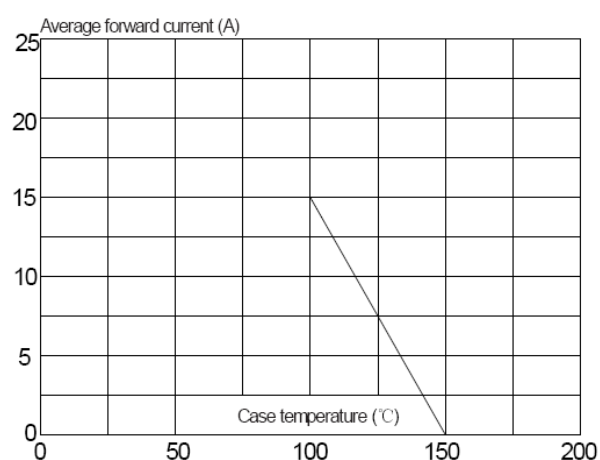


FIG.4: Forward current derating curve