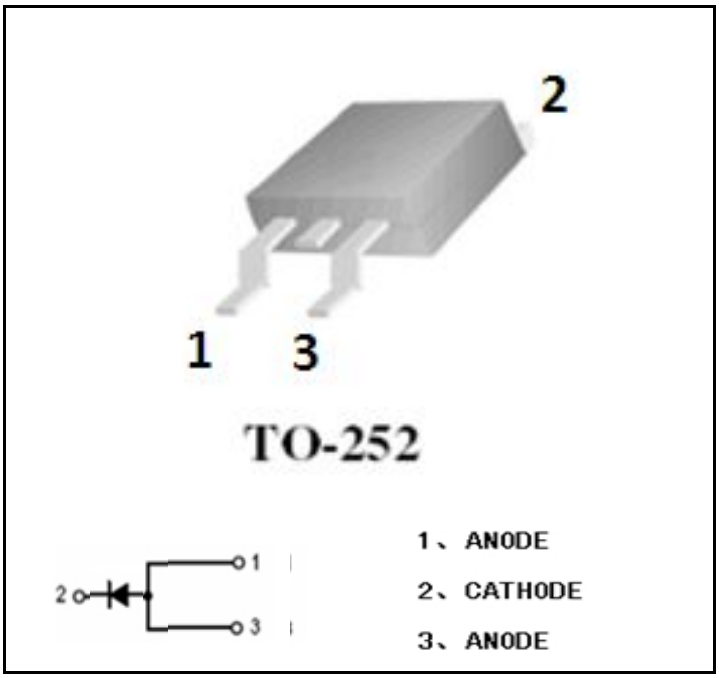
PRODUCT FEATURES

- Ultrafast Recovery Time
- Soft Recovery Characteristics
- Low Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Low Leakage Current



APPLICATIONS

- Freewheeling, Snubber, Clamp
- Inversion Welder
- PFC
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- UPS

ABSOLUTE MAXIMUM RATINGS

T_C=25° C unless otherwise specified

Symbol	Parameter	Test Conditions	Max.	Unit
V_R	D.C. Reverse Voltage		400	V
V_{RRM}	Repetitive Reverse Voltage		400	V
$I_{F(AV)}$(per leg)	Average Forward Current	T_C=110°C, Duty=0.5	10	A
I_{FM}	Peak Repetitive Forward Current	TC=110°C, Duty=0.5	20	A
I_{FSM}	Non-Repetitive Surge Forward Current	T=45°C, 8.3ms	120	A
T_J	Junction Temperature		-55 to +175	°C
T_{STG}	Storage Temperature Range		-55 to +175	°C

ELECTRICAL AND THERMAL CHARACTERISTICS

T_C=25° C unless otherwise specified

Symbol	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
I_{RM}	Reverse Leakage Current	V_R=400V, T_J=25°C		--	--	25	μA
		V_R=400V, T_J=125°C		--	--	500	μA
V_F	Forward Voltage	I_F=10A, T_J=25°C		--	1.2	1.5	V
		I_F=10A, T_J=125°C		--	1	--	V
t_{rr}	Reverse Recovery Time (I_F=1A, V_R=30V, di_F/dt=-200A/μs)			--	30	--	ns
t_{rr}	Reverse Recovery Time	I_F=10A VR=400V diF/dt=-200A/μs	T_J=25°C	--	60	--	ns
t_{rr}	Reverse Recovery Time		T_J=125°C	--	95	--	ns
Q_{rr}	Reverse Recovery Charge		T_J=125°C	--	185	--	nC
I_{RRM}	Max. Reverse Recovery Current		T_J=125°C	--	8	--	A

TO-252 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	2.10		2.50	E	5.30		6.30
B	0.80		1.25	e1	2.25		2.35
b	0.50		0.80	e2	4.45		4.75
b1	0.50		0.90	L1	9.20		10.60
b2	0.45		0.70	L2	0.90		1.75
C	0.45		0.70	L3	0.60		1.10
D	6.30		6.75	K	-0.1		0.10
D1	5.10		5.50