

# **Fast Recovery Diode**

# **FEATURES**

- Full diffusion process, flat type ceramic tube package
- Double sides cooling, High current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



#### **APPLICATIONS**

- High power converters
- AC/DC switching
- · Phase controlled rectifying

# **ABSOLUTE MAXIMUM RATINGS**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{R}$	Repetitive Peak Reverse Voltage		4500	V
I <sub>F(AV)</sub>	Average Forward Current	T <sub>C</sub> =85℃	290	Α
I <sub>FSM</sub>	Surge Forward Current	T <sub>j</sub> =125℃	4500	А
T <sub>J</sub>	Junction Temperature		-40~125	°C
T <sub>stg</sub>	Storage Temperature Range		-40~140	°C

# THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.11	°C/W

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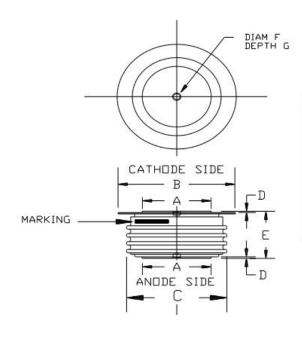
# **Fast Recovery Diode**

#### **ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Forward Voltage drop	I <sub>F</sub> = 1200A, T <sub>j</sub> = 125℃	4.15	V
I <sub>RRM</sub>	Instantaneous Reverse Current	V <sub>RM</sub> =V <sub>RRM</sub>	100	mA
t <sub>rr</sub>	Reverse Recovery Time	$I_{FM}$ = 1000A, dl/dt=10A/µs; $T_j$ = 125 $^{\circ}$ C	4	μs

## **OUTLINE PACKAGE**





DIMENSIONS	Min. mm	Max. mm	Min. In.	Max. In.
DIAM A	33.02	34.29	1.30	1.35
DIAM B	55.88	63.50	2.20	2.50
DIAM C		54.61		2.15
D	0.76		0.03	
E	25.40	27.18	1.00	1.07
F	3.30	3.81	0.13	0.15
G	1.78	2.03	0.07	0.08

STRIKE DISTANCE = .73 INCH / 18.5 MM MIN. CREEPAGE DISTANCE = 1.17 INCH / 29.7 MM MIN.

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