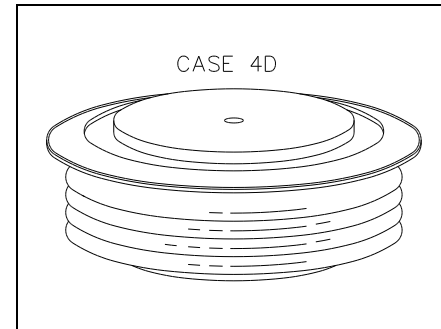

HIGH POWER FAST RECOVERY RECTIFIER

Features:

- . All Diffused Structure
- . Fast Switching Performance
- . Blocking capability up to 2200 volts
- . Rugged Ceramic Hermetic Package
- . Pressure Assembled Device



ELECTRICAL CHARACTERISTICS AND RATINGS

Reverse Blocking

Device Type	V _{RRM} (1)	V _{RSM} (1)
R9461514	1500	1600
R9461614	1600	1700
R9461814	1800	1900
R9462014	2000	2100
R9462214	2200	2300

V_{RRM} = Repetitive peak reverse voltage

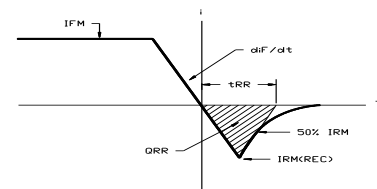
V_{RSM} = Non repetitive peak reverse voltage (2)

Repetitive peak reverse leakage	I _{RRM}	10 mA 75 mA (3)
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Notes:

All ratings are specified for T_j=25 °C unless otherwise stated.

- (1) All voltage ratings are specified for an applied 50Hz/60Hz sinusoidal waveform over the temperature range -40 to +125°C.
- (2) 10 msec. max. pulse width
- (3) Maximum value for T_j = 125°C.



REVERSE RECOVERY CHARACTERISTIC

Conducting - on state

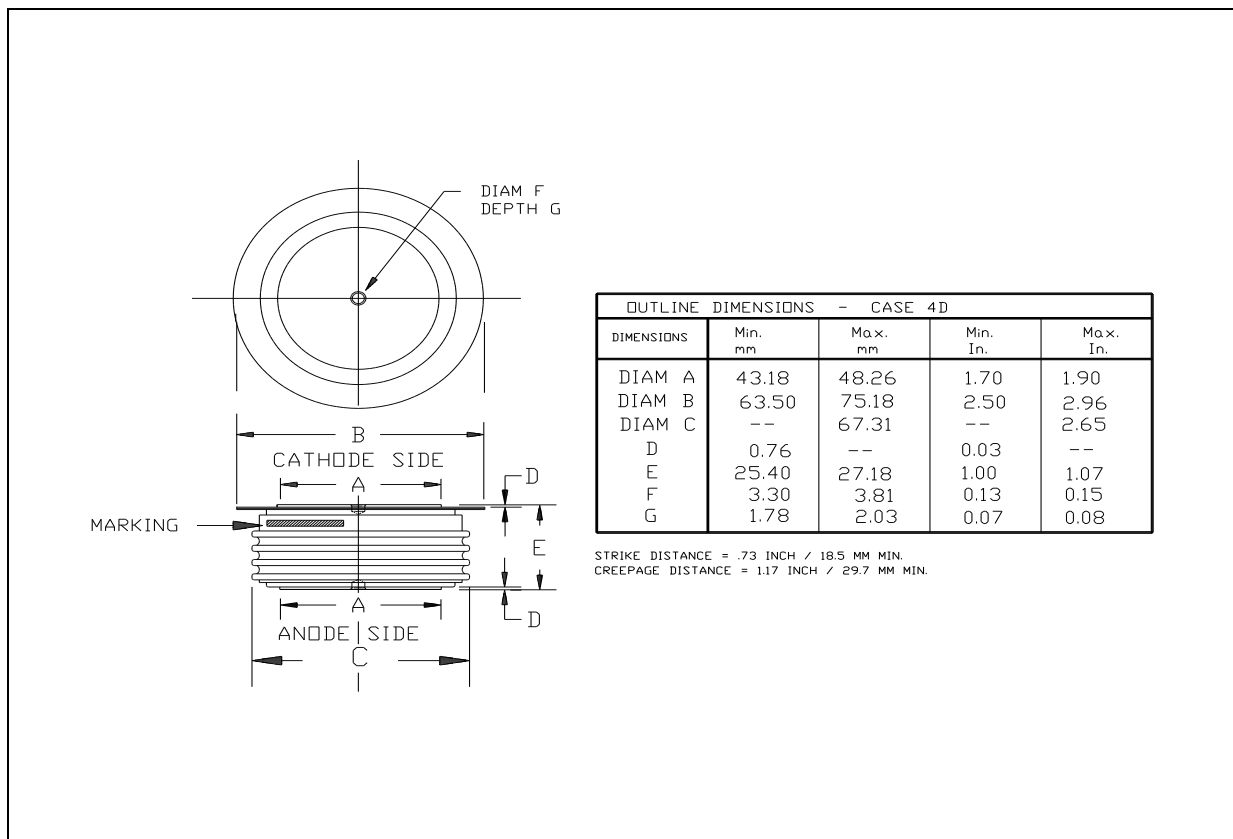
Parameter	Symbol	Min	Max.	Typ.	Units	Conditions
Average value of on-state current	I _{F(AV)}		1400		A	Sinewave, 180° conduction, T _c = 70°C
RMS value of on-state current	I _{FRMS}		2540		A	Nominal value
Peak one cycle surge (non repetitive) current	I _{FSM}		19600		A	10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, T _j = 125 °C
I square t	I ² t		2.32x10 ⁶		A ² s	10 msec
Peak on-state voltage	V _{FM}		2.65		V	I _{FM} = 2900 A; Duty cycle ≤ 0.01%; T _{jmax}
Reverse Recovery Current (4)	I _{RM(REC)}					
Reverse Recovery Charge (4)	Q _{rr}		378		μC	I _{FM} = 1000 A; dI _F /dt = 10 A/μs; T _{jmax}
Reverse Recovery Time (4)	t _{RR}		4.9		μs	I _{FM} = 1000 A; dI _F /dt = 10 A/μs; T _{jmax}

* For guaranteed maximum values, contact factory

Parameter	Symb ol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+125		°C	
Storage temperature	T_{stg}	-40	+150		°C	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		0.023 0.046		°C/W	Double sided cooled Single sided cooled
Thermal resistance - case to sink	$R_{\theta(c-s)}$.010 .020		°C/W	Double sided cooled * Single sided cooled *
Mounting force	P	5000 22.3	6000 26.7		lb. kN	
Weight	W			16 460	oz. g	

* Mounting surfaces smooth, flat and greased

CASE OUTLINE AND DIMENSIONS



Rectifier

Fast Recovery