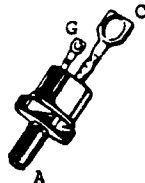


SFS2510 THROUGH SFS2540 25 AMP FAST SWITCHING SILICON CONTROLLED RECTIFIER 100 - 400 VOLTS	SSDI 14849 FIRESTONE BL. LA MIRADA, CA 90638 (213) 921-9660
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CASE STYLE TO-48

FEATURES

- ▶ HIGH di/dt , 400A/us
- ▶ HIGH dv/dt , 200V/us
- ▶ LOW t_q , $\leq 15\mu s$
- ▶ ANODE COMMON TO CASE
- ▶ HERMETICALLY SEALED

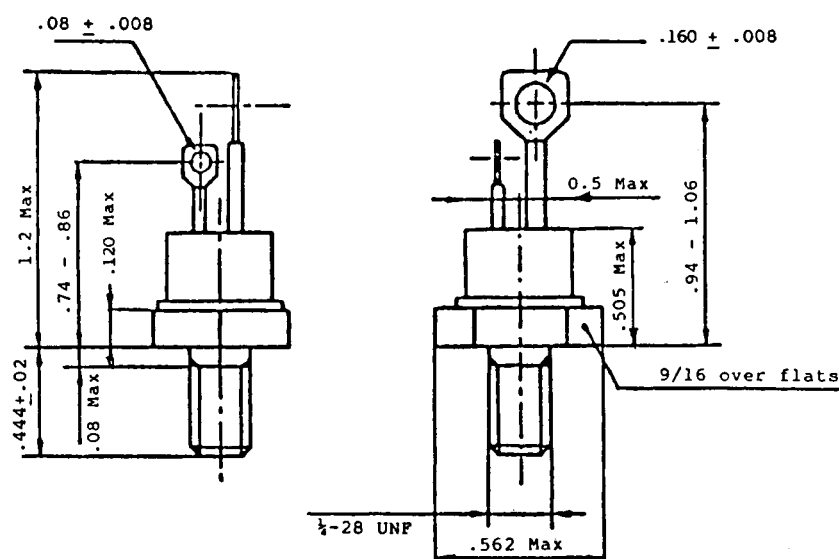

MAXIMUM RATINGS ($T_J = 25^\circ C$ unless otherwise noted, $R_{GK} = 1000\Omega$)

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Forward and Reverse Blocking Voltage SFS2510 SFS2520 SFS2525 SFS2530 SFS2540	VDRM and VRRM	100 200 250 300 400	Volts
Non-repetitive Peak Reverse Blocking Voltage ($t \leq 5.0ms$) SFS2510 SFS2520 SFS2525 SFS2530 SFS2540	VRSM	150 300 350 400 500	Volts
RMS On-State Current (All Conduction Angles)	IT(RMS)	35	Amps
Average On-State Current $TC = 50^\circ C$	IT(AV)	25	Amps
Peak Non-Repetitive Surge Current (One Cycle, 60Hz, $T_J = 120^\circ C$, $t = 8.3ms$)	ITSM	210	Amps
Peak Gate Power	PGM	60	Watt
Average Gate Power	PG(AV)	1.0	Watt
Peak Gate Current	IGM	10	Amps
Peak Gate Voltage	VGM	15	Volts
Operating Junction Temperature Range	T_J	-65 to +135	$^\circ C$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ C$
Thermal Resistance Junction to Case	θ_{JC}	1.45	$^\circ C/W$

ELECTRICAL CHARACTERISTICS (TC = 25 °C, RGK = 10000)

CHARACTERISTIC	SYMBOL	MIN	MAX	UNITS
Peak Reverse Blocking Current (Rated VRRM)	IRMO	-	2	mA
Peak Forward Blocking Current (Rated VDRM)	IFMR	-	2	mA
Peak On-State Voltage (IF=25A Peak, t=1ms, Duty Cycle ≤1%) (IF=100A Peak, t=1ms, Duty Cycle ≤1%)	VF	-	2.05 2.25	Volts
Gate Trigger Current (Note 1) (VD = 12 Vdc, RL = 33 Ω)	IGT	-	180	mA
Gate Trigger Voltage (VD = 12 Vdc, RL = 33 Ω)	VGT	-	1.5	Volts
Holding Current (IT = 500mA, Gate Open)	IH	-	70	mA

PHYSICAL DIMENSIONS



SSDI

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