

New Jersey Semi-Conductor Products, Inc.

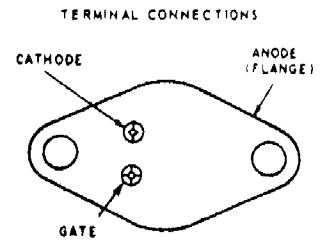
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S2200(2N3528, 2N3529, 2N4102), S2710, S2700(2N3228, 2N3525, 2N4101, Series

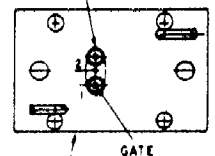
5-A Silicon Controlled Rectifiers

RATINGS	CONTROLLED RECTIFIER TYPES						UNITS
	2N3228 S2710B	2N3525 S2710B	2N4101 S2710M	2N3528	2N3529	2N4102	
Transient Peak Reverse Voltage (Non-Repetitive), V_{RM} (non-rep)	330	660	700	330	660	700	volts
Peak Reverse Voltage (Repetitive), V_{RM} (rep)	200	400	600	200	400	600	volts
Peak Forward Blocking Voltage (Repetitive), V_{FBOM} (rep)	200	400	600	200	400	600	volts
Forward Current:							
For case temperature (T_C) of + 75°C, and unit mounted on heat sink -							
Average DC value at a conduction angle of 180°, I_{FAV}	3.2	3.2	3.2	—	—	—	amperes
RMS value, I_{FRMS}	5.0	5.0	5.0	—	—	—	amperes
For other conditions, See Fig. 2							
For free-air temperature (T_{FA}) of 25°C, and with no heat sink employed -							
Average DC value at a conduction angle of 180°, I_{FAV}	1.7	1.7	1.7	1.3	1.3	1.3	amperes
RMS value, I_{FRMS}	—	—	—	2.0	2.0	2.0	amperes
For other conditions, See Figs. 3 & 4							
Peak Surge Current, I_{FM} (surge) :							
For one cycle of applied principal voltage,							
60 Hz (sinusoidal), $T_C = 75^\circ\text{C}$		60			60		ampere
50 Hz (sinusoidal), $T_C = 75^\circ\text{C}$		50			50		ampere
For more than one cycle of applied voltage.		See Fig. 5			See Fig. 5		
Fusing Current (for SCR protection): $T_J = -40$ to 100°C , $t = 1$ to 8.3 ns, I^2t		15			15		ampere ² second
Rate of Change of Forward Current, di/dt		200			200		amperes/ microsecond
$V_{FB} = V_{B00}$ (min. value) $I_{GT} = 200$ mA, $0.5 \mu\text{s}$ rise time							
Gate Power*:							
Peak, Forward or Reverse, for $10 \mu\text{s}$ duration, P_{GM} . (See Figs. 7 and 9)		13			13		watts
Average, P_{GAV}		0.5			0.5		watt
Temperature:							
Storage, T_{stg}		-40 to +125			-40 to +125		°C
Operating (Case), T_C		-40 to +100			-40 to +100		°C



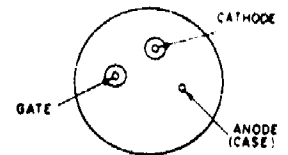
92CS-27720

BOTTOM VIEW
JEDEC TO-66
CATHODE



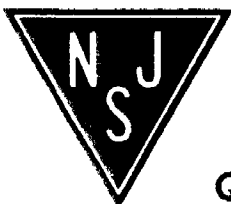
92CS-27725

BOTTOM VIEW
TO-66 with Heat Radiator



92CS-27722

BOTTOM VIEW
JEDEC TO-8



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Quality Semi-Conductors