New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

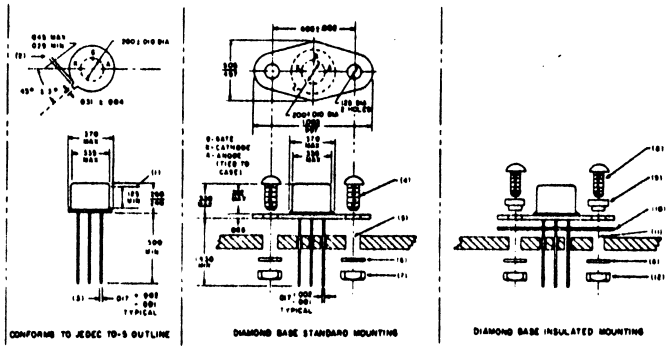
SCR

1.6A RMS Up to 400 Volts

C5 Series
2N2322-29
2N2322A-28A
C511 (Diamond Base)‡

OUTLINE DRAWING

(1) This zone is controlled for automatic handling. The variation in actual diameter within this zone shall not exceed .010
(2) Measured from max. diameter of the actual device
(3) The specified lead diameter applies in the zone between .050 and .250 from the base seat. Between .250 and 1.5 maximum of .021 diameter is held. Outside of these the lead diameter is not controlled. Leads may be inserted without damage in .031 holes while device enters .171 hole concentric with lead hole circle
(4) #4-40 screw, stainless steel, ⅜" long
(5) .170 hole (#31 drill)
(6) Int. tooth lockwasher, stainless steel
(7) #4-40 nut, stainless steel
(8) #2-56 screw, stainless steel, ⅜" long
(9) Shoulder washer, vulcanized fiber
(10) Mica insulator, .003 thick
(11) .0935 hole (#42 drill)
(12) #2-56 nut, stainless steel
All dimensions in inches



MAXIMUM ALLOWABLE RATINGS

TYPES† JEDEC	TYPES† GE	REPETITIVE PEAK OFF-STATE VOLTAGE, V_{DRM} $T_C = -65°C$ to $+125°C$ R_{GK} = 1000 OHMS (2N2322-29) = 2000 OHMS (2N2322A-28A)	REPETITIVE PEAK REVERSE VOLTAGE, V_{RRM} $T_C = -65°C$ to $+125°C$	NON-REPETITIVE PEAK REVERSE VOLTAGE, V_{RSM} (≦ 10 Millisec.) $T_C = -65°C$ to $+125°C$
2N2322	C5U	25V.*	25V.*	40V.*
2N2322A	—	25V.*	25V.*	40V.*
2N2323	C5F	50V.*	50V.*	75V.*
2N2323A	—	50V.*	50V.*	75V.*
2N2324	C5A	100V.*	100V.*	150V.*
2N2324A	—	100V.*	100V.*	150V.*
2N2325	C5G	150V.*	150V.*	225V.*
2N2325A	—	150V.*	150V.*	225V.*
2N2326	C5B	200V.*	200V.*	300V.*
2N2326A	—	200V.*	200V.*	300V.*
2N2327	C5H	250V.*	250V.*	350V.*
2N2327A	—	250V.*	250V.*	350V.*
2N2328	C5C	300V.*	300V.*	400V.*
2N2328A	—	300V.*	300V.*	400V.*
2N2329	C5D	400V.*	400V.*	500V.*

Peak Positive Anode Voltage, PFV ..... 500 Volts

RMS On-State Current, $I_{T(RMS)}$ ..... 1.6 Amperes (all conduction angles)

Average On-State Current, $I_{T(AV)}$ ..... Depends on conduction angle (see Charts 2, 3, 5 and 6)

Critical Rate-of-Rise of On-State Current, di/dt:
Gate Triggered Operation, Switching from Rated Voltage ..... 50 Amperes per microsecond

Peak One Cycle Surge (non-rep) On-State Current, I_{TSM} ..... 15 Amperes*

I^2t (for fusing), for times ⩾ 1.5 milliseconds ..... 0.5 Ampere²seconds

Peak Gate Power Dissipation, P_{GM} ..... 0.1 Watts*

Average Gate Power Dissipation, $P_{G(AV)}$ ..... 0.01 Watts*

Peak Positive Gate Current, I_{GM} ..... 0.1 Amperes*

Peak Positive Gate Voltage, V_{GM} ..... 6 Volts*

Peak Negative Gate Voltage, V_{GM} ..... 6 Volts*

Storage Temperature, T_{STG} ..... −65°C to +150°C*

Operating Temperature, T_J ..... −65°C to +125°C*

*Indicates data included on JEDEC type number registration

†When ordering the Diamond Base versions, be sure to include the proper voltage letter symbol. For example: The 25V Diamond Base version of the C5U (2N2322) is type number C511U.

‡The C511 series is identical to the C5 (2N2322-29) series except that a diamond base flange is soldered to the base of the unit. All ratings and characteristics are common to both series. See charts 17 thru 21 for Transient Thermal Impedance and Current Curves.