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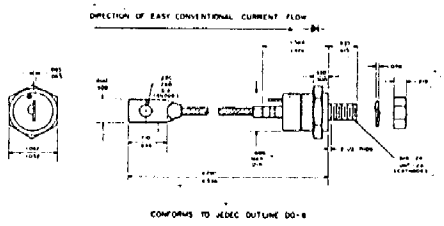
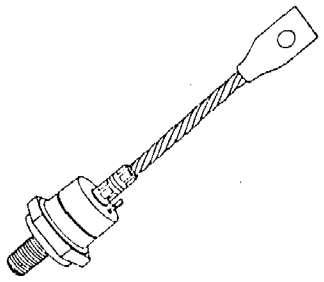
Silicon Rectifier

1N3289-96,R

Features:

- Freedom from Thermal Fatigue Failure
- Higher Surge Current Capabilities
- NEMA Overload Ratings
- Forward and Reverse Polarities





RATINGS AND SPECIFICATIONS

	1N3289 1N3289R	1N3290 1N3290R	1N3291 1N3291R	1N3292 1N3292R	1N3293 1N3293R	A70S A71S	1N3294 1N3294R	A70T A71T	1N3295 1N3295R	1N3296 1N3296R	
Maximum Allowable Transient Peak Reverse Voltage (non-recurrent, 5 millisecond maximum duration)	300	400	525	650	800	925	1050	1175	1300	1500	volts
Maximum Allowable Repetitive Peak Reverse Voltage, V_{RM} (rep)	200	300	400	500	600	700	800	900	1000	1200	volts
Maximum Allowable RMS Reverse Voltage	140	210	280	350	420	490	560	630	700	840	volts
Maximum Allowable DC Blocking Voltage**	200	300	400	500	600	700	800	900	1000	1200	volts
Maximum Allowable Average Forward Current (single phase, 130°C stud temperature)	← 100 amperes →										
Maximum Allowable Peak One-Cycle Surge Current (60 cps single-phase basis, non-recurrent)	← 1600 amperes →										
Minimum I^2t Rating (non-recurrent)	← 4000 amperes²-seconds (See Curve 8) →										
Maximum Full Load Voltage Drop (full-cycle average, 130°C stud temperature, 100 amperes average single phase)	← 0.6 volts →										
Maximum Full Load Reverse Current (full-cycle average, 130° stud temperature, single phase)	9.5	9.0	9.0	8.0	6.5	6.0	5.5	5.5	4.5	3.5	ma
Maximum Thermal Resistance (junction to stud)	← DC = 0.4°C/w; 1φ & 3φ = .55°C/w; 6φ = .72°C/w →										
Storage and Junction Operating Temperature	← −40°C to +200°C →										
Max. Stud Torque***	← 100 Lb-in (120 Kg-cm) →										
Min. Stud Torque	← 90 Lb-in (105 Kg-cm) →										
Weight	← Approximately 2½ ounces →										

NOTES:

† "R" indicates reverse polarity

* Rating assumes rectifier cell heat sink of less than 3°C/watt.

** Rating assumes rectifier cell heat sink of less than 1.5°C/watt.

*** Use of silicone grease between rectifier base and heat sink is recommended.

Non-recurrent voltage and current ratings, as contrasted to repetitive ratings, are ratings which apply for occasional or unpredicable overloads. For example, the forward surge current ratings are non-recurrent ratings that are used in fault coordination design work.