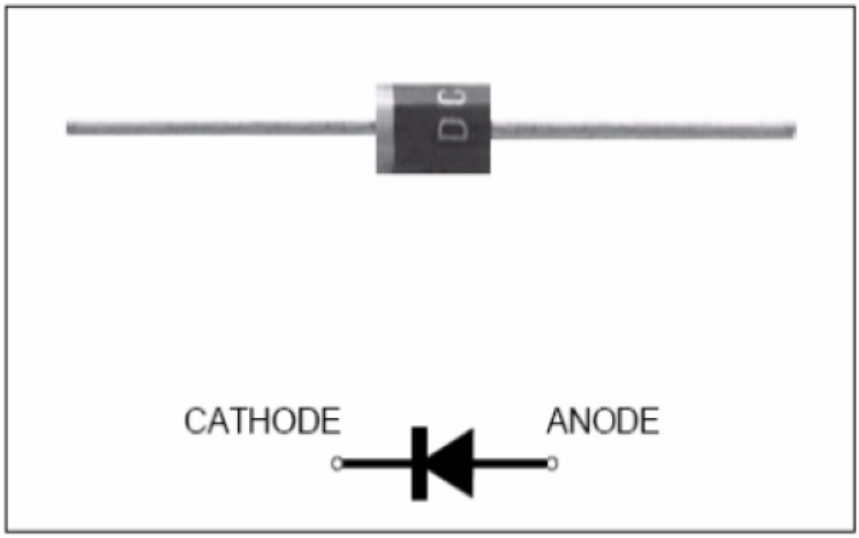
R1200F thru R2000F

1.FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Low leakage
* Low forward voltage drop
* High current capability
* Easily cleaned with Freon,Alcohol and similar solvents
* High temperature metallurgically bonded construction
* Diffused junction
* Capable of meeting environmental standards of MIL-S-19500
* High temperature soldering guaranteed: 260°C/10 seconds

Fast Switching High Voltage Rectifiers

Reverse Voltage 1200 to 2000V
Forward Current 0.2A



We declare that the material of product compliance with RoHS requirements.

2.Mechanical Data

Case: JEDEC DO-41, molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 oz., 0.34 g
Handling precautin:None

3.Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	R 1200F	R 1500F	R 1800F	R 2000F	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1500	1800	2000	V
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	V
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A = 75°C	IF(AV)	0.2				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25				A
Typical thermal resistance (Note 2)	RθJA	55				°C/W
Operating junction and storage temperature range	TJ, TSTG	–50 to +150				°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	R 1200F	R 1500F	R 1800F	R 2000F	Unit
Maximum instantaneous forward voltage at IF(AV)	V_F	2.0				V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	5.0 100				μA
Typical reverse recovery time (Note 1)	trr	500				ns
Typical junction capacitance at 4.0V, 1MHz	CJ	15				PF

NOTES:
1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. Thermal resistance from junction to ambient at 0.375” (9.5mm) lead length, P.C.B. mounted

4.Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

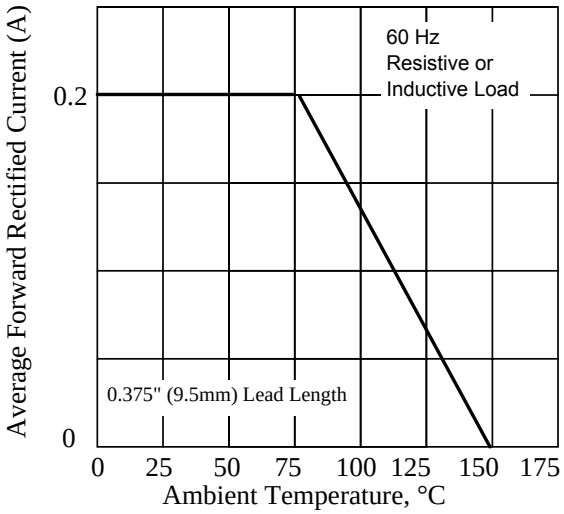


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

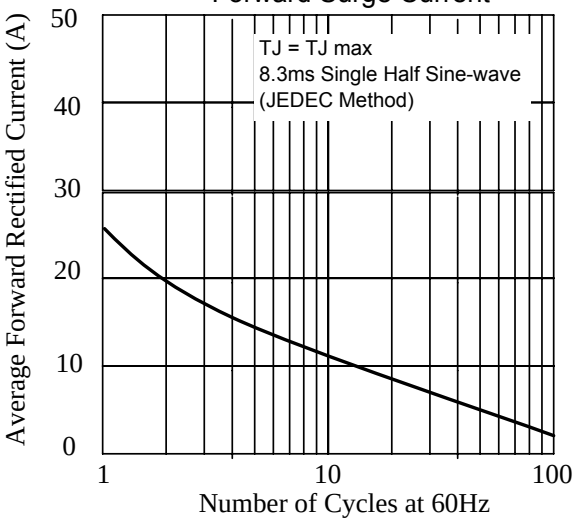


Fig 3. – Typical Instantaneous Forward Characteristics

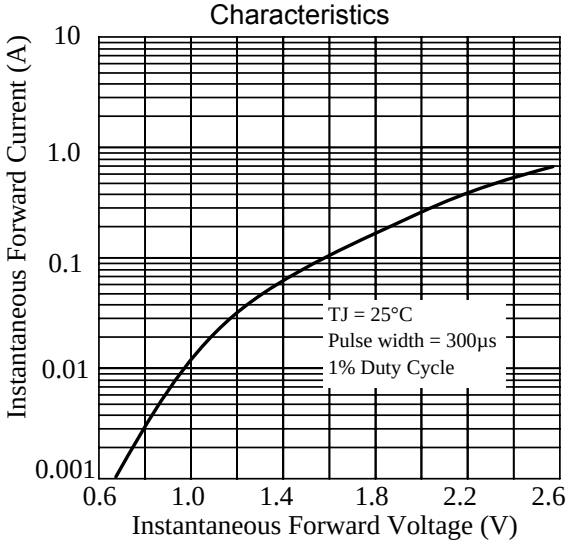


Fig 4. – Typical Reverse Characteristics

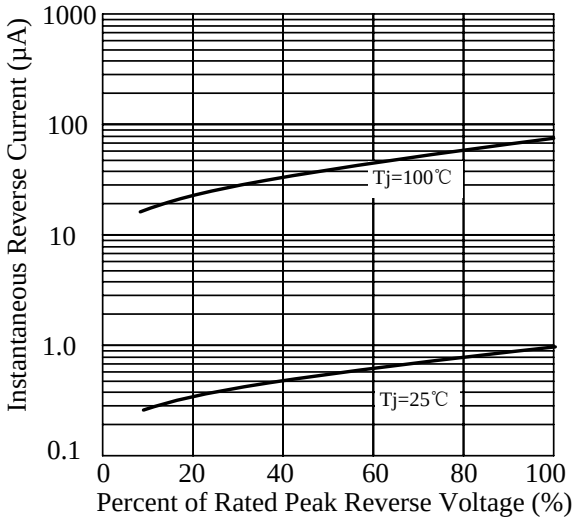


Fig 5. –typical transient thermal impedance

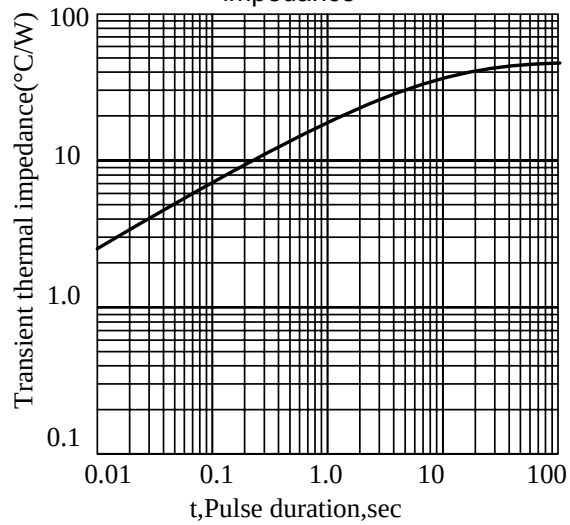
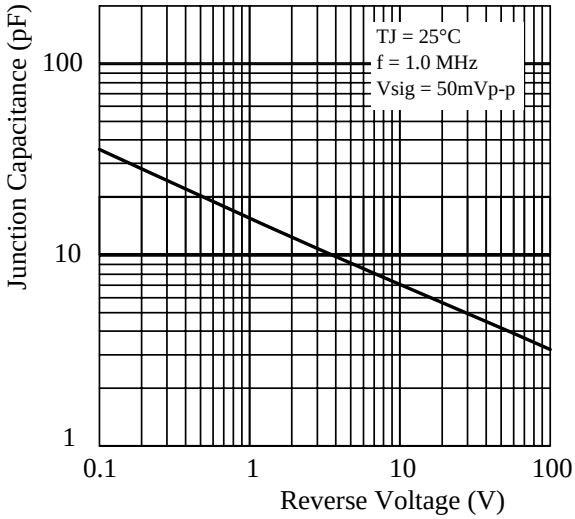
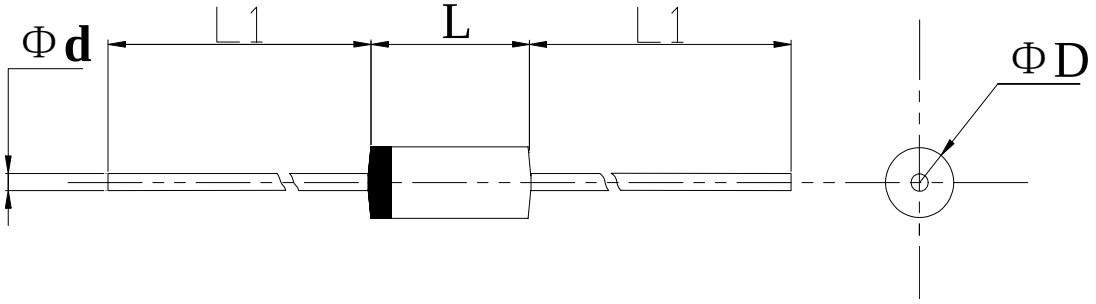


Fig 6. – Typical Junction Capacitance



5.Package Dimensions in inches and (millmeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.166	0.205	4.2	5.2
L1	1.0	-	25.4	-
ΦD	0.080	0.107	2.0	2.7
Φd	0.028	0.034	0.7	0.9

Note:
DO-41
molded plastic case
The marking band indicates the cathode