

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Rating	Symbol	MR1120	MR1121	MR1122	MR1123	MR1124	MR1125	MR1126	MR1128	MR1130	Unit
Peak repetitive reverse voltage	V_{RRM}										V
Working peak reverse voltage	V_{RWM}	50	100	200	300	400	500	600	800	1000	V
DC blocking voltage	V_R										V
Non-repetitive peak reverse voltage (½ wave, single phase, 60 cycle peak)	V_{RSM}	100	200	300	400	500	600	720	1000	1200	V
RMS reverse voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	560	700	V
Average rectified forward current (Rated V_R)	I_O	12 @ $T_C = 150^\circ\text{C}$									A
Peak repetitive forward current	I_{FRM}	75 @ $T_C = 150^\circ\text{C}$									A
Non-repetitive peak surge current (superimposed on rated current at rated voltage, $T_C = 150^\circ\text{C}$)	I_{FSM}	300 for ½ cycle									A
I^2t rating (non repetitive, $1\text{ms} < t < 8.3\text{ms}$)	I^2t	375									$\text{A}_{(rms)}^2\text{S}$
Operating and storage junction temperature range	T_J, T_{stg}	-65 to +190									$^\circ\text{C}$
Maximum thermal resistance Junction to case	$R_{\theta JC}$	2.5									$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

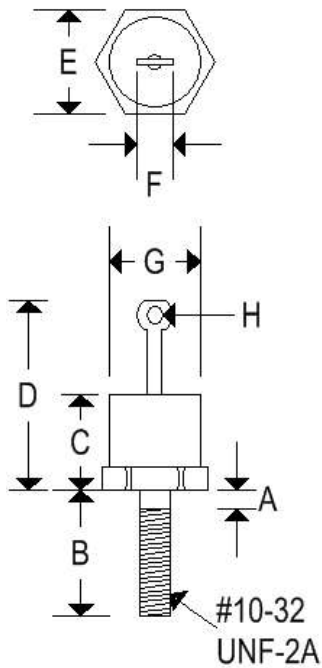
Parameter	Symbol	MR1120	MR1121	MR1122	MR1123	MR1124	MR1125	MR1126	MR1128	MR1130	Unit
Full cycle average forward voltage drop ($I_O = 12\text{A}$ and rated V_R , $T_C = 150^\circ\text{C}$, half wave)	$V_{F(AV)}$	0.55									V
DC forward voltage drop ($I_F = 12\text{A}_{dc}$, $T_C = 25^\circ\text{C}$)	V_F	1.0									V
Full cycle average reverse current ($I_O = 12\text{A}$ and rated V_R , $T_C = 150^\circ\text{C}$, half wave)	$I_{R(AV)}$	1.5									mA
DC reverse current (Rated V_R , $T_C = 25^\circ\text{C}$)	I_R	0.5									mA

MR1120-MR1126, MR1128, MR1130

12A STANDARD RECOVERY RECTIFIER

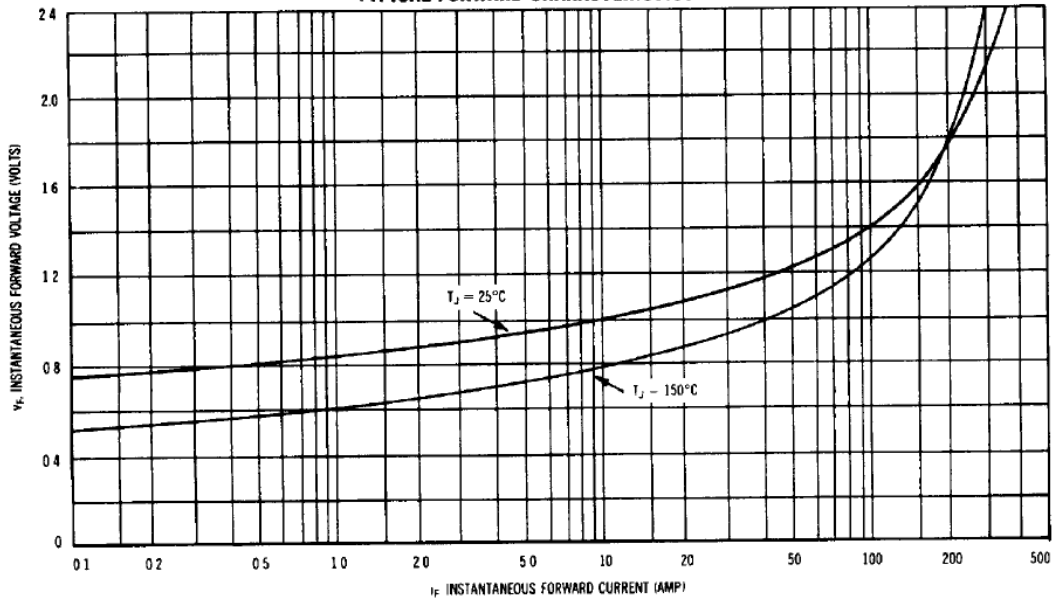
MECHANICAL CHARACTERISTICS

Case	DO-4(R)
Marking	Alpha-numeric
Normal polarity	Cathode is stud
Reverse polarity	Anode is stud (add "R" suffix)

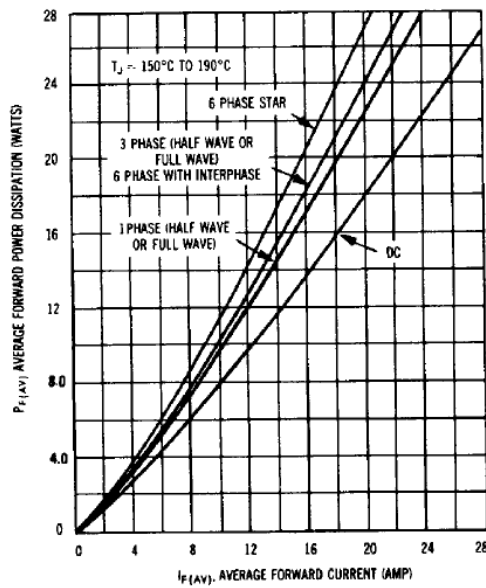


	DO-4(R)			
	Inches		Millimeters	
	Min	Max	Min	Max
A	-	0.078	-	1.981
B	0.422	0.453	10.719	11.506
C	-	0.405	-	10.287
D	-	0.800	-	20.320
E	0.420	0.440	10.668	11.176
F	-	0.250	-	6.350
G	-	0.424	-	10.770
H	0.066	-	1.676	-

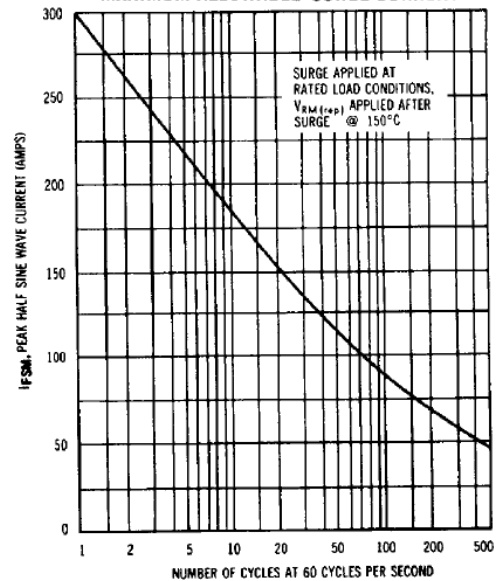
TYPICAL FORWARD CHARACTERISTICS



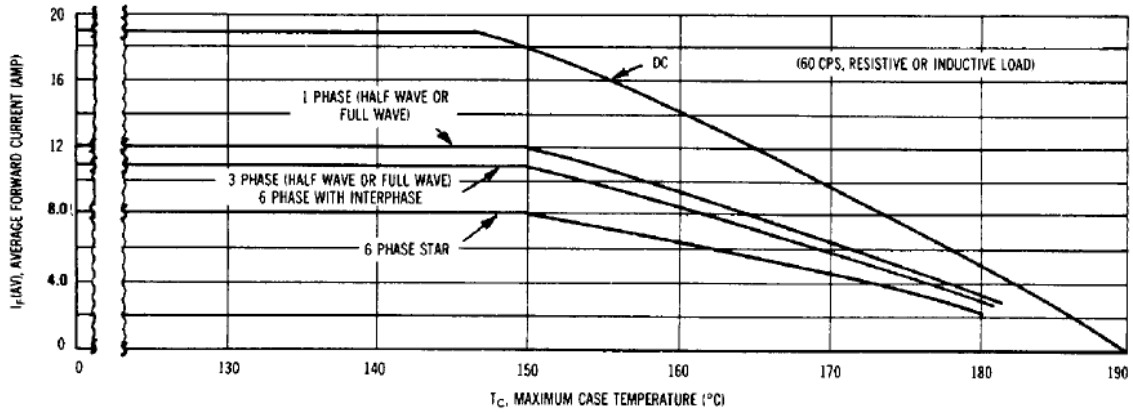
FORWARD POWER DISSIPATION



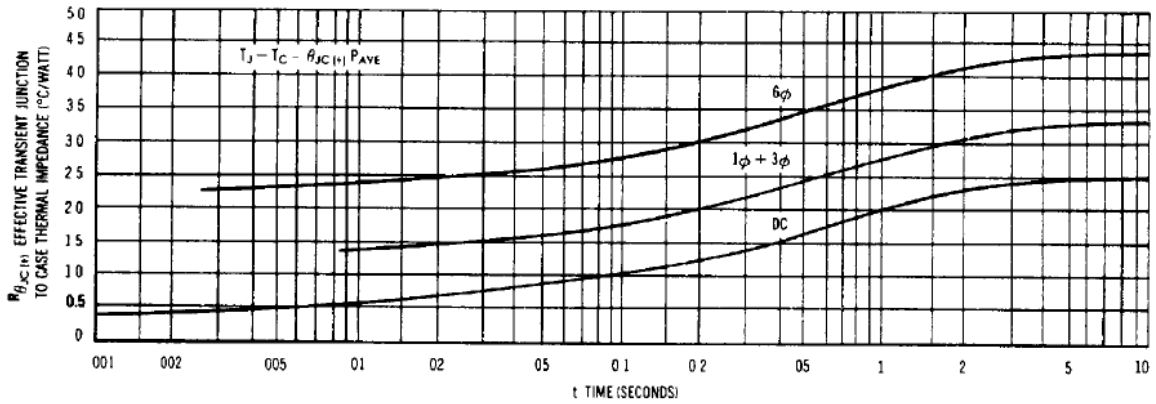
MAXIMUM ALLOWABLE SURGE CURRENT



MAXIMUM CURRENT RATINGS



EFFECTIVE TRANSIENT THERMAL IMPEDANCE



CURRENT DERATING DATA

