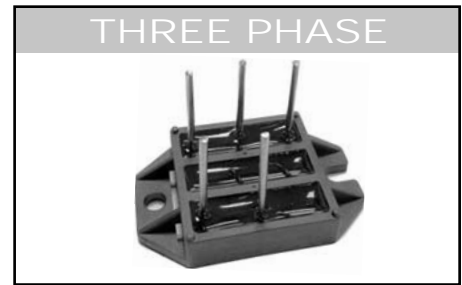
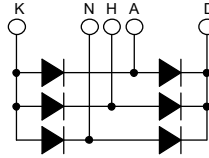




THREE PHASE STANDARD RECOVERY BRIDGE 86A

Features

- High Surge Capability
- Types up to 1600V V_{RRM}
- Isolation Type Package

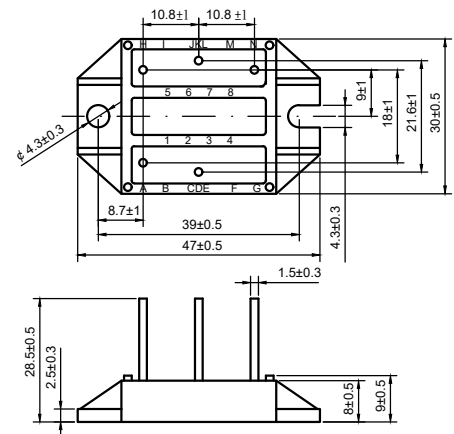


Dimensions in mm (1 mm = 0.0394")

Maximum Ratings

- Junction Operating Temperature : -40°C to +150°C
- Storage Temperature : -40°C to +125°C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
DAR3PV086-160W	1600V	1600V



Electrical Characteristics @ 25°C Unless Otherwise Specified

Definition	Conditions	Symbol	min.	typ.	max.	Unit
Bridge output current	$T_c = 90^\circ\text{C}$, per module $T_{vj} = 150^\circ\text{C}$	I_{DAV}			90	A
Max. forward surge current	$t = 10\text{ ms}$; (50 Hz), $T_{vj} = 45^\circ\text{C}$ sine $t = 8,3\text{ ms}$; (60 Hz), sine $V_R = 0\text{ V}$	I_{FSM}			550 595	A A
	$t = 10\text{ ms}$; (50 Hz), $T_{vj} = 150^\circ\text{C}$ sine $t = 8,3\text{ ms}$; (60 Hz), sine $V_R = 0\text{ V}$				470 505	A A
Value for fusing	$t = 10\text{ ms}$; (50 Hz), sine $T_{vj} = 45^\circ\text{C}$ $t = 8,3\text{ ms}$; (60 Hz), sine $V_R = 0\text{ V}$	I^2t			1.52 1.48	kA^2s kA^2s
	$t = 10\text{ ms}$; (50 Hz), sine $T_{vj} = 150^\circ\text{C}$ $t = 8,3\text{ ms}$; (60 Hz), sine $V_R = 0\text{ V}$				1.11 1.06	kA^2s kA^2s
Reverse current	$V_R = 1600\text{ V}$ $T_{vj} = 25^\circ\text{C}$ $V_R = 1600\text{ V}$ $T_{vj} = 150^\circ\text{C}$	I_R			40 1.5	μA mA
Forward voltage drop	$I_F = 80\text{ A}$ $T_{vj} = 25^\circ\text{C}$	V_F			1.5	V
Threshold voltage for power loss calculation only	$T_{vj} = 150^\circ\text{C}$	V_{F0}			0.8	V
		r_F			7.8	m Ω
Total power dissipation	$T_c = 25^\circ\text{C}$	P_{tot}			135	W
Junction capacitance	$V_R = 400\text{ V}$; $f = 1\text{ MHz}$ $T_{vj} = 25^\circ\text{C}$	C_J		20		pF
Creepage distance on surface and Striking distance through air	terminal to terminal terminal to backside	$d_{Spp/App}$	6.0			mm
		$d_{Spb/Appb}$	10.0			mm
Isolation voltage	50/60 Hz, RMS; $I_{ISOL} \leq 1\text{ mA}$ $t = 1\text{ second}$ $t = 1\text{ minute}$	V_{ISOL}	3000 2500			V V
Thermal resistance junction to case		R_{thJC}			0.9	K/W
Thermal resistance case to heatsink		R_{thCH}		0.4		K/W
Mounting torque		M_D	1.4		2	Nm



Figure .1- Typical Forward Characteristics

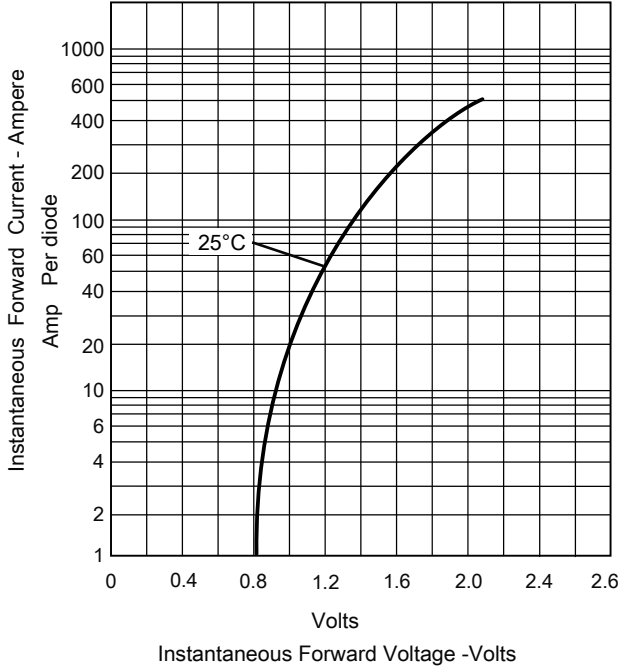


Figure .2-Bridge Output Current Curve

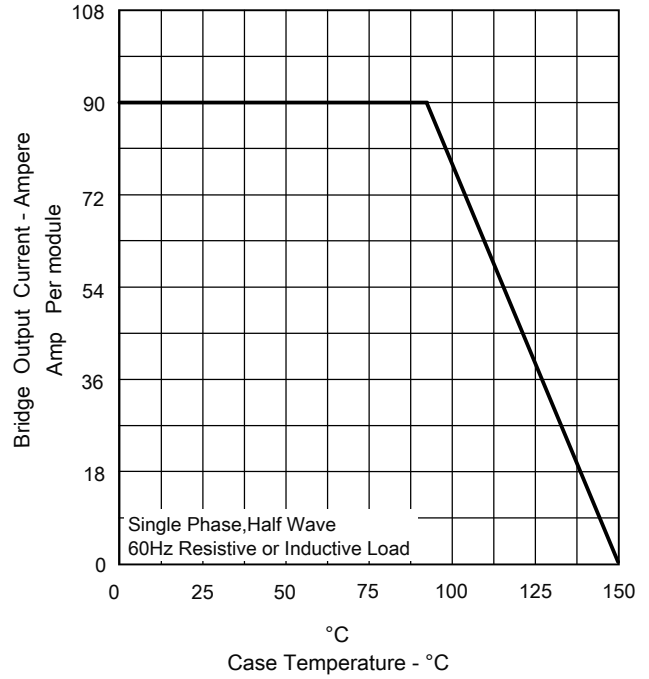


Figure .3- Peak Forward Surge Current

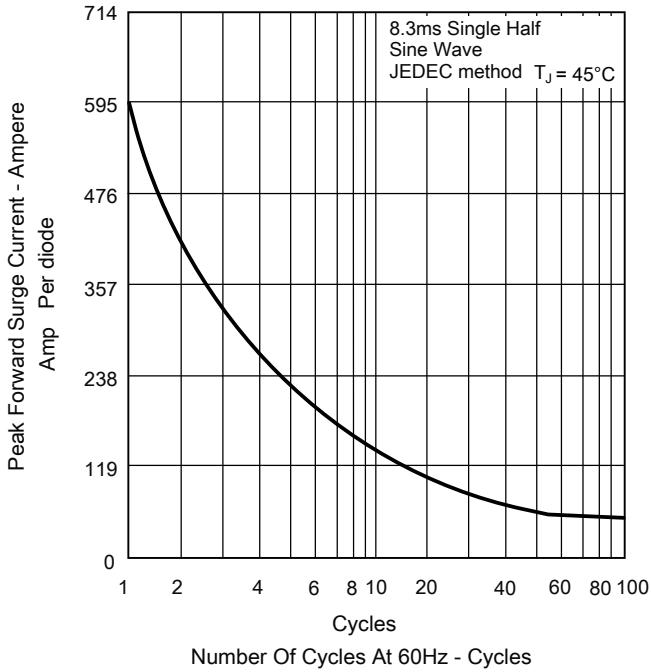
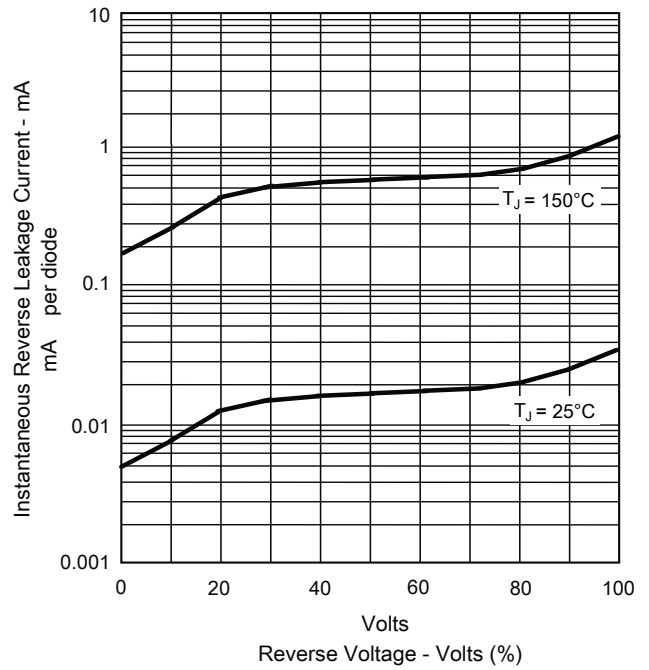


Figure .4 -Typical Reverse Characteristics





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