

# DIODE(ISOLATED MOLD TYPE)

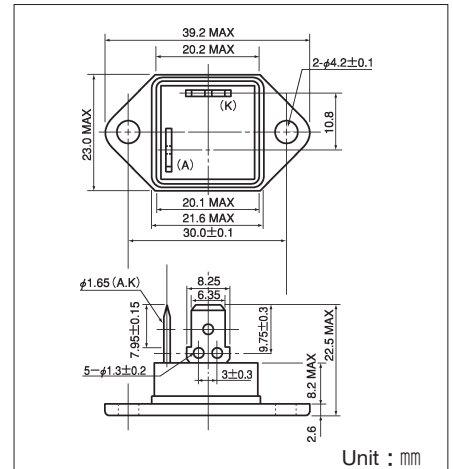
# DG20AA



UL;E76102 (M)

DG20AA is a medium power isolated module diode suitable for wide range of industrial and home electronics use. DG20AA is highly reliable by glass passivation.

- $I_{F(AV)} = 20A$ ,  $V_{RRM} = 1600V$
- Tab terminals for easy wiring.



Unit : mm

## Maximum Ratings

( $T_j = 25^\circ C$ )

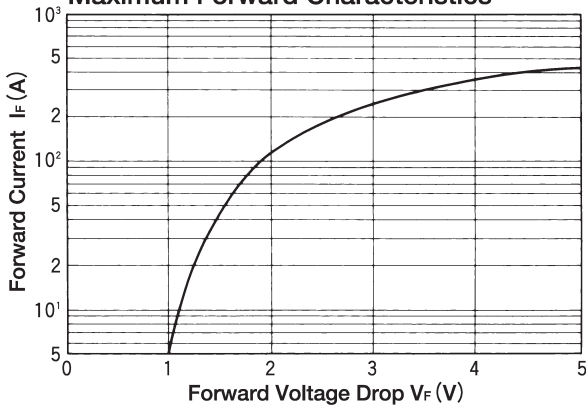
Symbol	Item	Ratings				Unit
		DG20AA40	DG20AA80	DG20AA120	DG20AA160	
$V_{RRM}$	Repetitive Peak Reverse Voltage	400	800	1200	1600	V
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	480	960	1300	1700	V

Symbol	Item	Conditions	Ratings	Unit
$I_{F(AV)}$	Average Forward Current	Single phase, half wave, $180^\circ$ conduction, $T_c : 101^\circ C$	20	A
$I_{F(RMS)}$	R.M.S. Forward Current	Single phase, half wave, $180^\circ$ conduction, $T_c : 101^\circ C$	31	A
$I_{FSM}$	Surge Forward Current	$1/2$ cycle, 50Hz/60Hz, peak value, non-repetitive	410/450	A
$I^2t$	$I^2t$	Value for one cycle of surge current	840	$A^2S$
$T_j$	Junction Temperature		$-40 \sim +150$	$^\circ C$
$T_{stg}$	Storage Temperature		$-40 \sim +125$	$^\circ C$
$V_{ISO}$	Isolation Breakdown Voltage (R.M.S.)	A.C. 1minute	2500	$^\circ C$
	Mounting Torque (M4)	Recommended Value 1.0~1.4 (10~14)	1.5 (15)	$N \cdot m$ ( $kgf \cdot cm$ )
	Mass		23	g

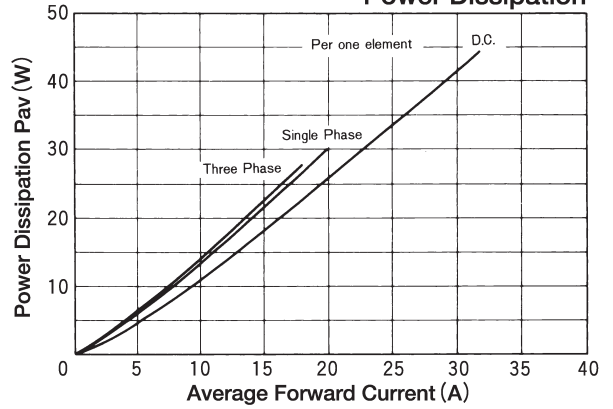
## Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
$I_{RRM}$	Repetitive Peak Reverse Current, max.	at $V_{DRM}$ , single phase, half wave, $T_j = 125^\circ C$	8	mA
$V_{FM}$	Forward Voltage Drop, max.	Forward current 65A, $T_j = 25^\circ C$ , Inst. measurement	1.65	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	1.60	$^\circ C/W$

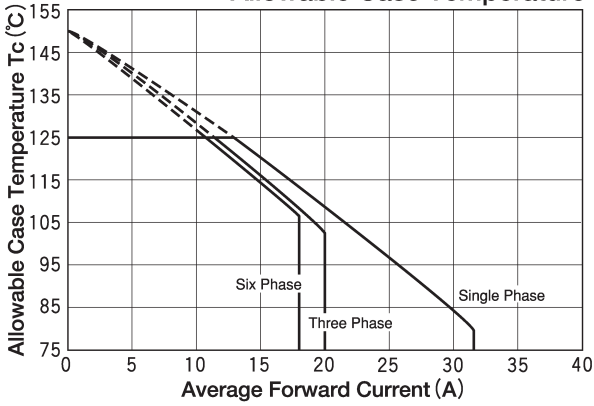
Maximum Forward Characteristics



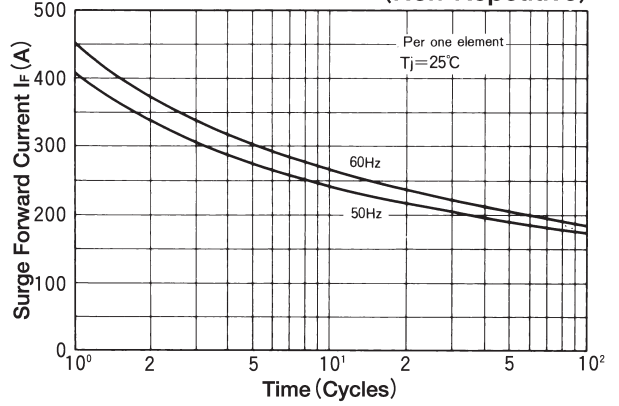
Average Forward Current vs. Power Dissipation



Average Forward Current vs. Allowable Case Temperature



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance

