INTERNATIONAL
IRI

POWER MODULE

IRKD55

FEATURES

- Heat transfer through ceramic.
- Hard solder joints for high reliabilty
- Isolated base mounting

TYPICAL APPLICATIONS

- Non-controllable rectifiers for AC-AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motor

TECHNICAL DATA

DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
IRKD55/12	**1200**	**1300**
IRKD55/16	**1600**	**1700**
IRKD55/20	**2000**	**2100**
IRKD55/22	**2200**	**2300**

SYMBOL	CONDITIONS	VALUES
I_{FAV}	Sin. 180; T_{case} = 100°C	60 amp.
I_{FSM} I^2t	Tvj=25°C; 10 ms Tvj=25°C	1600 amp. 12.89 KA^2s
I_{RRM}	Tvj=25°C Tvj=125°C	0.5mA 5 mA
V_F V_0 R_0	Tvj=25°C (I_F=150Amp.); max Tvj=125°C Tvj=125°C	1.5 V 0.96 V 2.8mΩ
$R_{th(j-c)}$ $R_{th(c-h)}$ Tvj Tstg	per module per module	0.5 °C/W 0.10 °C/W -40 to +125 °C -40 to +125 °C
Mounting torque		5 Nm/Per bolt
Weight	Approx.	95 gms
$V_{(isol)}$	Ac 50 Hz rms 1 min	3000 volts
Package Outline		IR-1

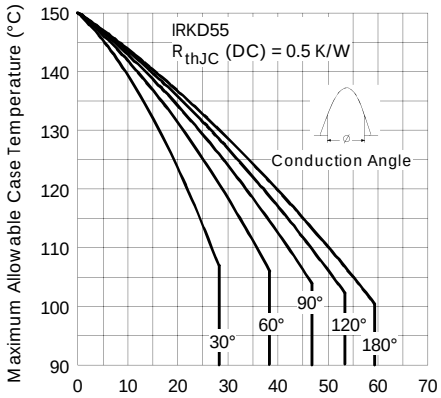


Fig. 1 - Current Ratings Characteristics

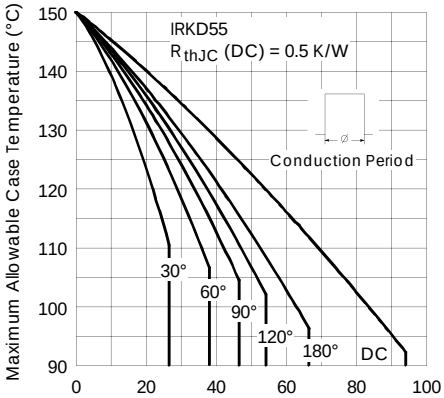


Fig. 2 - Current Ratings Characteristics

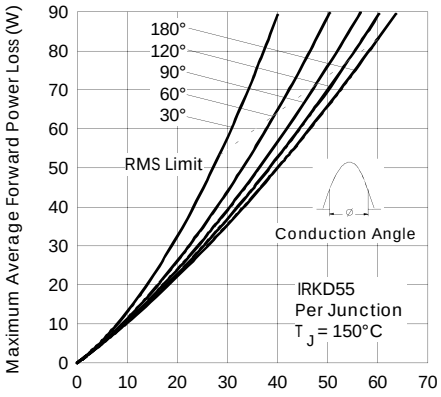


Fig. 3 - Forward Power Loss Characteristics

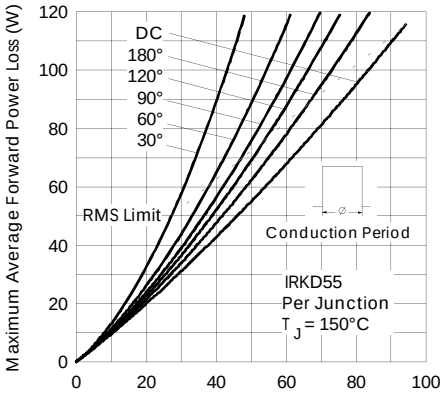


Fig. 4 - Forward Power Loss Characteristics

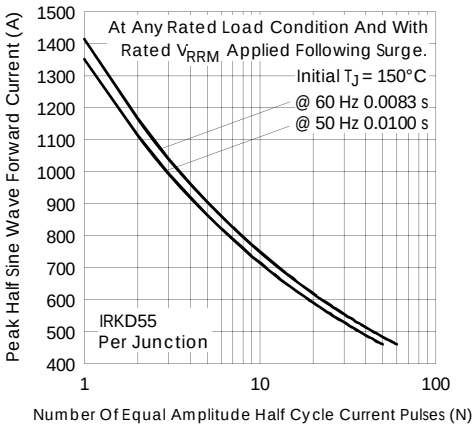


Fig. 5 - Maximum Non-Repetitive Surge Current

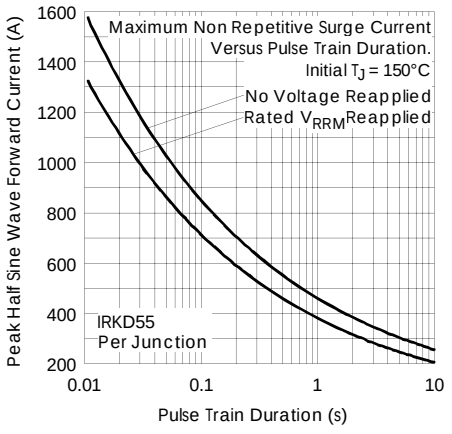


Fig. 6 - Maximum Non-Repetitive Surge Current

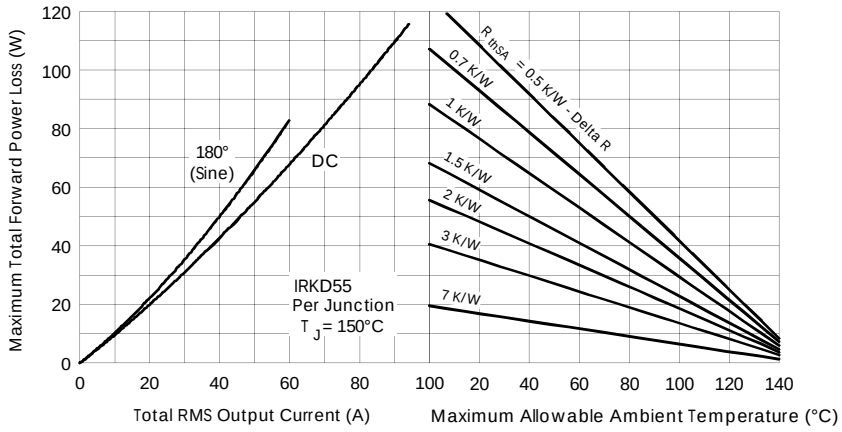


Fig. 7 - Forward Power Loss Characteristics

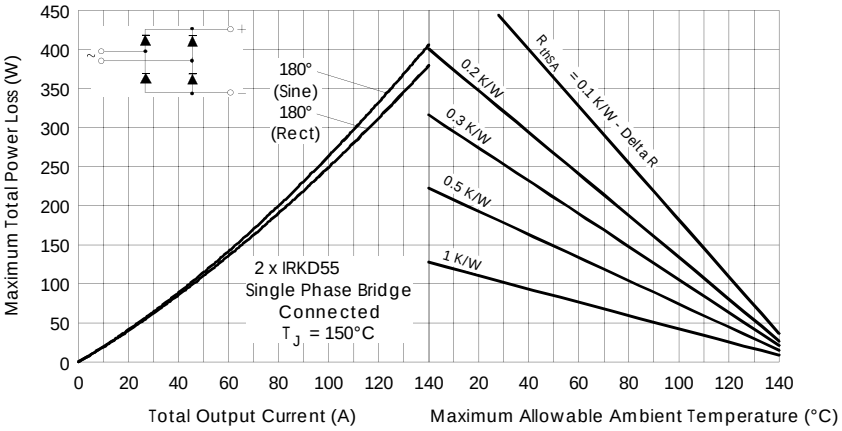


Fig. 8 - Forward Power Loss Characteristics

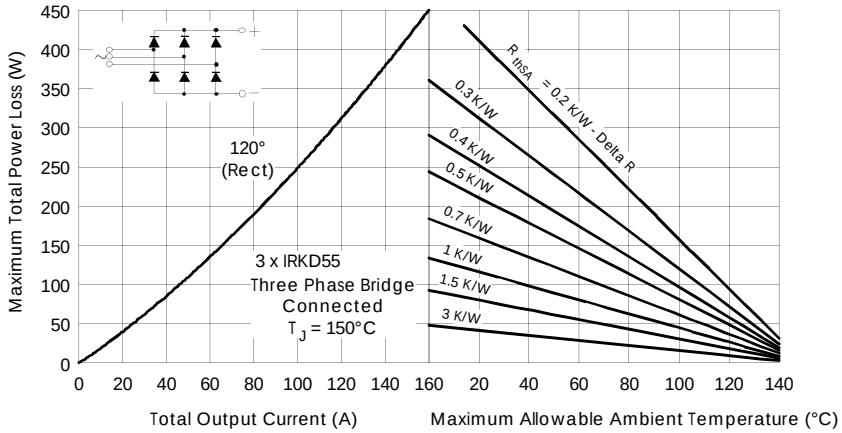


Fig. 9 - Forward Power Loss Characteristics

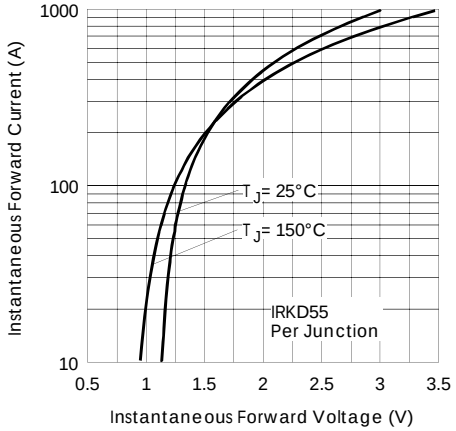


Fig. 19 - Forward Voltage Drop Characteristics

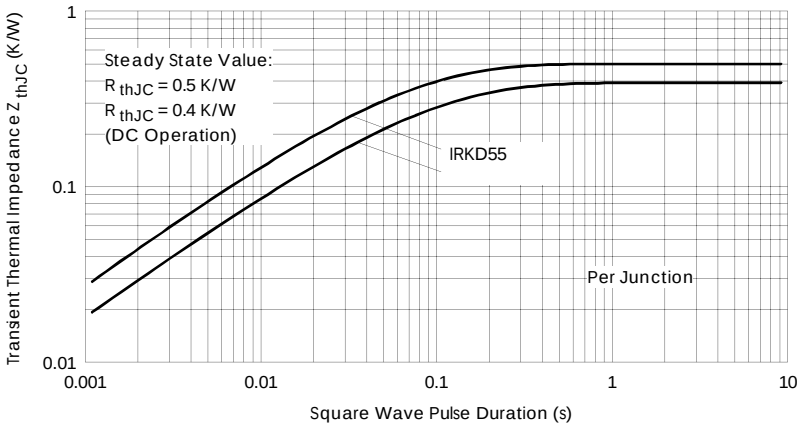
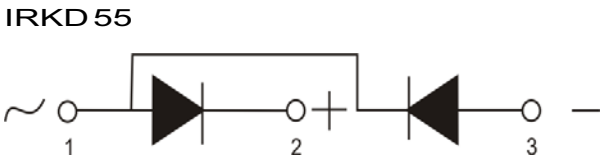


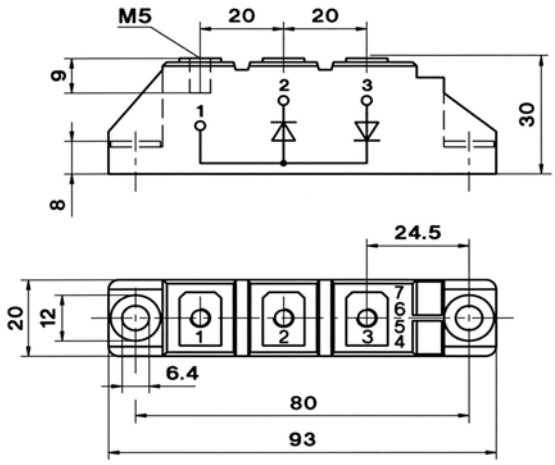
Fig. 21 - Thermal Impedance Z_{thJC} Characteristic

CIRCUIT DIAGRAM



PACKAGE OUTLINE

IRKD 55



IR- 1

All dimensions are in mm.

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