

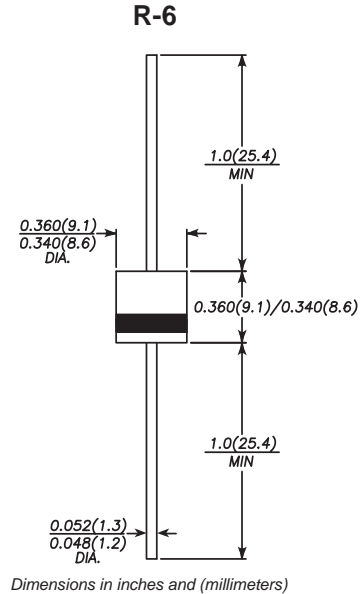


# FR2004

Reverse Voltage: 400 Volts Forward Current:20Amperes

## FEATURES

- Glass passivated junction
- For Surface Mount Applications, Easy to pick and place Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage current
- High temperature soldering guaranteed:260°C/10 seconds at terminals,Component in accordance to RoHS 2015/863/EU



## MECHANICAL DATA

- Case: R-6/2.0 molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,60HZ, resistive or inductive load.  
For capacitive load,derate current by 20%.)

Parameters	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Voltage	$V_{RMS}$	280	V
Maximum DC Blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	800	A
Maximum Instantaneous Forward Voltage $I_F=5A$ $I_F=20A$	$V_F$	0.95 1.3	V
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	$T_j=25^\circ C$	5.0
		$T_j=125^\circ C$	100
Maximum reverse recovery time(Note1)	$t_{rr}$	150	ns
Typical junction capacitance(Note2)	$C_j$	220	pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	45	°C/W
	$R_{\theta JL}$	1.5	
Operating junction and storage temperature range	$T_j, T_{STG}$	-55 to +150	°C

Note: 1.Test conditions:  $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$ .

2.Measured at 1MHZ and applied reverse voltage of 4.0 Volts.

3.Thermal resistance junction to lead. Measured in 3 mm distance from case



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

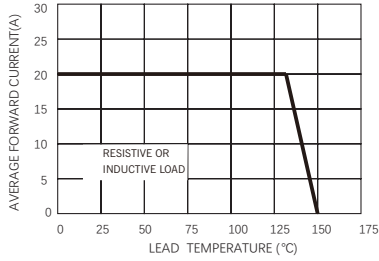


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

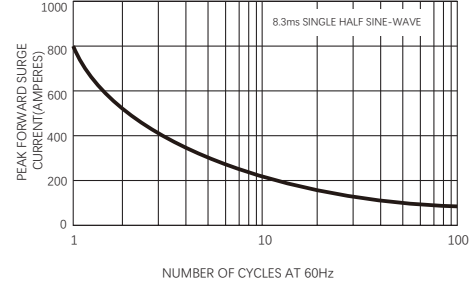


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

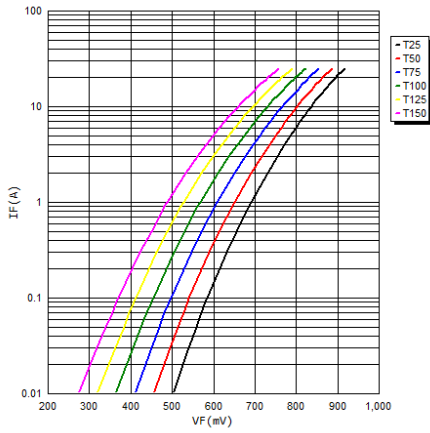


FIG.4-TYPICAL REVERSE CHARACTERISTICS

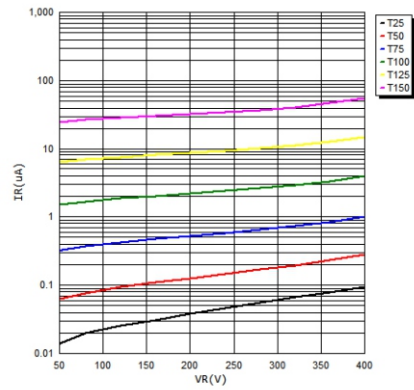
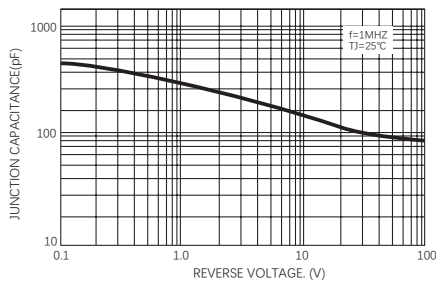


FIG.5-TYPICAL JUNCTION CAPACITANCE



单击下面可查看定价，库存，交付和生命周期等信息

[>>ZG\(中鑫半导体\)](#)