

Pb Free Plating Product

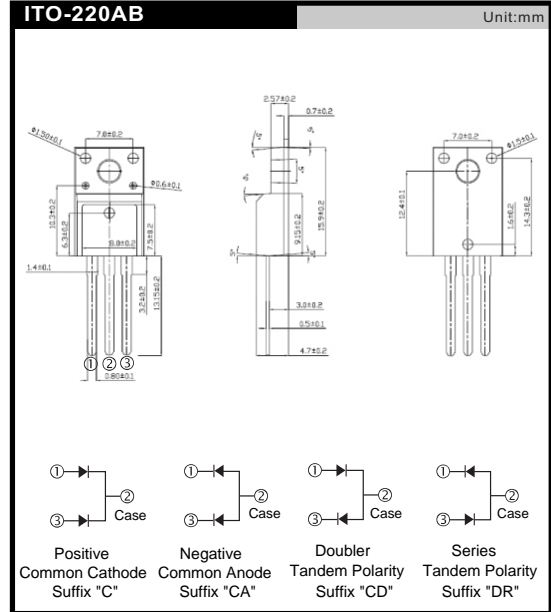
SFF164DR/SFF166DR/SFF168DR



16 Ampere Insulated Series Connection Fast Recovery Half Bridge Rectifiers

- Features**
- * Latest GPP technology with super fast recovery time
 - * Low forward voltage drop
 - * High current capability
 - * Low reverse leakage current
 - * High surge current capability
- Application**
- * Automotive Inverters and Solar Inverters
 - * Plating Power Supply, SMPS, Motor Control and UPS
 - * Car Audio Amplifiers and Sound Device Systems

- Mechanical Data**
- * Case: Fully Isolated Molding TO-220FP
 - * Epoxy: UL 94V-0 rate flame retardant
 - * Terminals: Solderable per MIL-STD-202 method 208
 - * Polarity: As marked on diode body
 - * Mounting position: Any
 - * Weight: 2.1 gram approximately



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%.

	SYMBOL	SFF164DR	SFF166DR	SFF168DR	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	V
Maximum RMS Voltage	VRMS	140	280	420	V
Maximum DC Blocking Voltage	VDC	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175	150		A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR		5.0 100		uA uA
Maximum Reverse Recovery Time (Note 1)	Trr		35		nS
Typical junction Capacitance (Note 2)	CJ		90		pF
Typical Thermal Resistance (Note 3)	Rj/c		2.2		°C/W
Operating Junction and Storage Temperature Range	Tj, Tstg	-55 to + 150			°C

NOTES : (1) Reverse recovery test conditions IF= 0.5A, R= 1.0A, Irr = 0.25A.
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
 (3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE



FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

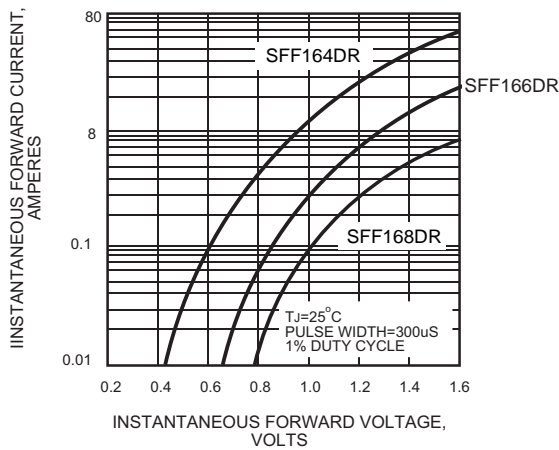


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



FIG.5 - TYPICAL JUNCTION CAPACITANCE

