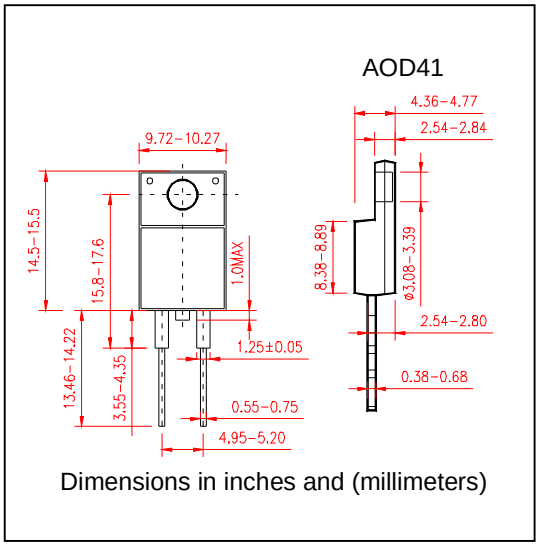
Diode AOD4120-AOD4170

VOLTAGE RANGE **30 t o 60 Volts**

CURRENT **16.0 Amperes**

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protechion
- Low Power Loss, High efficiency
- High Surge Capability
- High Current capacity and Low Forward Voltage Drop
- For use in low voltage high frequency inverters, Free wheeling, and polarity protection applications
- Plastic Material has UL Flammability Classification 94V-0



MECHANICAL DATA

- Case: AOD41 AC molded plastic
- Terminals: Plated Lead solderable per MIL-STD-202 Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx)
- Mounting Position: Any
- Marking: Type Number

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	AOD4120	AOD4130	AOD4140	AOD4150	AOD4160	AOD4170	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	30	35	40	45	50	60	V
Working Peak Reverse Voltage	V_{RWM}							
DC Blocking Voltage	V_R							
RMS Reverse Voltage	$V_{R(RMS)}$	21	25	28	32	35	42	V
Average Rectified Output Current (Note 1)@T_C=95℃	I_O	16.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	250						A
Forward Voltage Drop @I_F=16A,T_C=25℃	V_{FM}	0.55					0.65	V
Peak Reverse Current at Rated DC Blocking Voltage T_C = 25℃	I_{RM}	1.0						mA
Peak Reverse Current at Rated DC Blocking Voltage T_C = 100℃		50						
Typical Junction Capacitance(Note2)	C_j	700						pF
Typical Resistance Junction to case(Note1)	$R_{\theta JC}$	3.5						℃/W
Operating and Storage Temperature Range	T_J T_{STG}	(-55 to +150)						℃

Notes:

1. Thermal Resistance Junction to case mounted on heatsink
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

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CURRENT	**16.0 Ampere**

RATINGE AND CHARACTERISTIC CURVES SRFL1630 THRU SRFL1660

FIG.1-FORWARD CURRENT DERATING CURVE

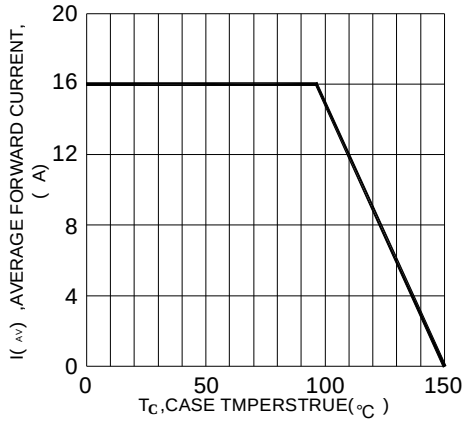

FIG.2-TYPICAL FORWARD CHARACTERISTICS

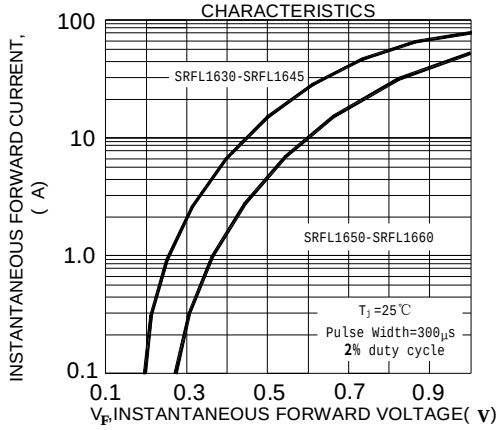

FIG.3 MAX NON-REPETITIVE SURGE CURRENT

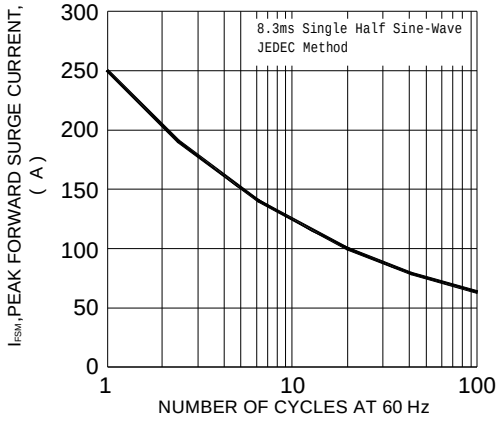

FIG4 TYPICAL JUNCTION CAPACITANCE PER ELEMENT

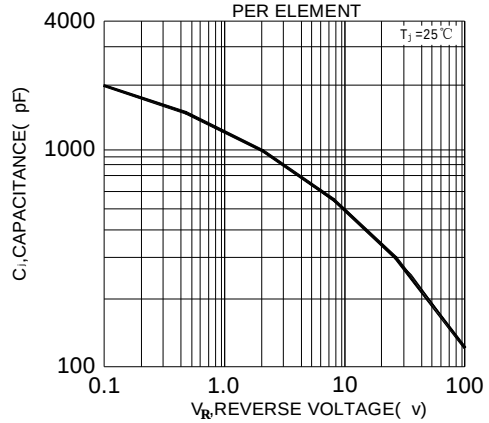

FIG.5-TYPICAL REVERSE CHARACTERISTICS