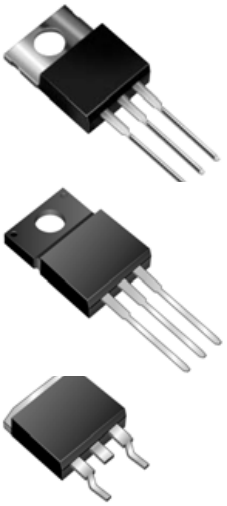
Dual Schottky Barrier Rectifiers
Reverse Voltage 100 Volts Forward Current 30.0 Amperes

Features

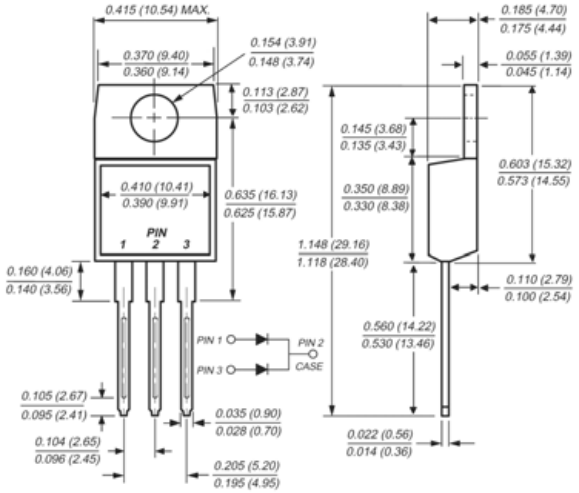
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25" (6.35mm) from case



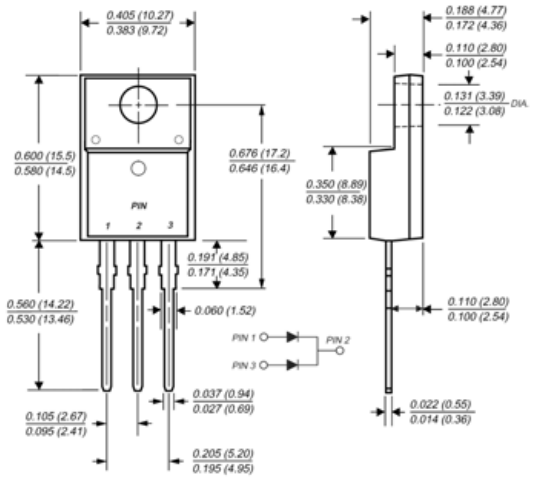
Mechanical Data

- Case: JEDEC TO-220AB, TO-220F , TO-263AB molded plastic body
- Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting Position: Any
- Mounting Torque: 10 in-lbs maximum
- Weight: 0.08 ounce, 2.24 grams

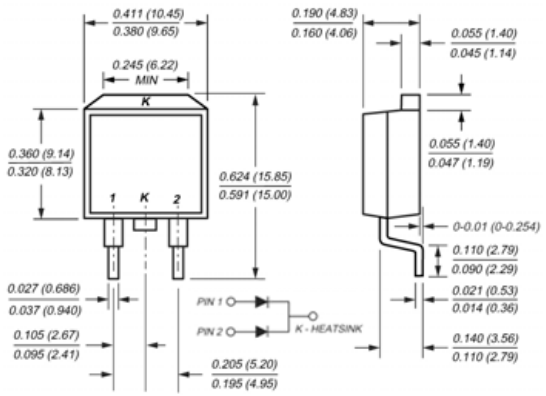
TO-220AB



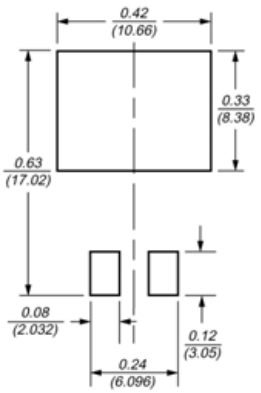
TO-220F



TO-263AB(D²PAK)



Mounting Pad Layout TO-263AB



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

(T_C = 25°C unless otherwise noted)

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	**TEST CONDITIONS**		**SYMBOL**		**UNIT**
Maximum repetitive peak reverse voltage			V_{RRM}	100	V
Working peak reverse voltage			V_{RWM}	100	V
Maximum DC blocking voltage			V_{DC}	100	V
Maximum average forward rectified current at Tc=105°C total device per diode			$I_{F(AV)}$	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	250	A
Peak repetitive reverse current per leg at tp=2.0us ， 1KHz			I_{RRM}	1.0	A
Voltage rate of change（rated VR）			DV/dt	10000	V/us
Operating junction temperature range			T_J	—65 to+150	°C
Storage temperature range			T_{STG}	—65 to+150	°C
Isolation voltage (ITO-220AB only) from terminal to heatsink t = 1 min			VAC	1500	V
Maximum instantaneous forward voltage per leg	IF=15A IF=15A	TC=25℃ TC=125℃	VF	0.85 0.75	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25℃ TJ=100°C	IR	500 7	uA mA

Thermal Characteristics Ta=25℃ unless otherwise noted

Symbol	**Parameter**	**Max**	**Unit**
$R_{\theta JC}$	Thermal Resistance，Junction to Case per Leg	4.0	°C /W
$R_{\theta JA}$	Thermal Resistance，Junction to Ambient per Leg	62.5	°C /W

Note：

1. Screw mounting with 4-40 screw，where washer diameteris≤4.9mm(0.19〃)
2. Pulse test:300us pulse width,1% duty cycle

Rating and Characteristic Curves

FIG.1 - FORWARD CURRENT DERATING CURVE

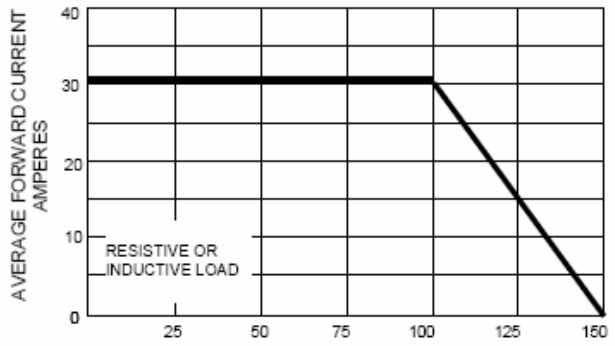
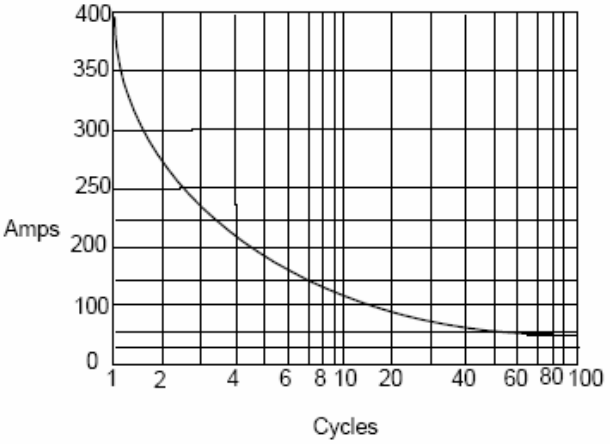
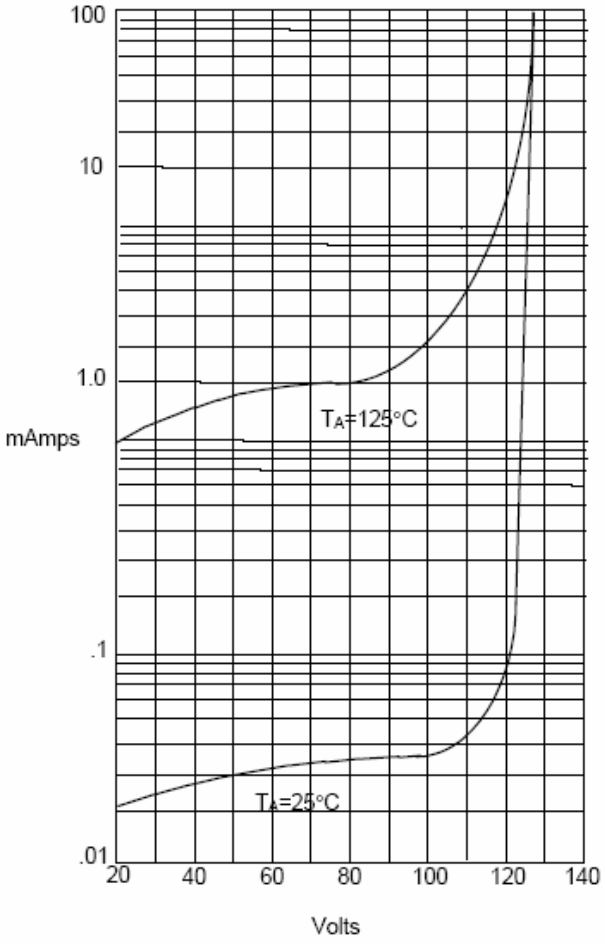


Figure 2
Peak Forward Surge Current



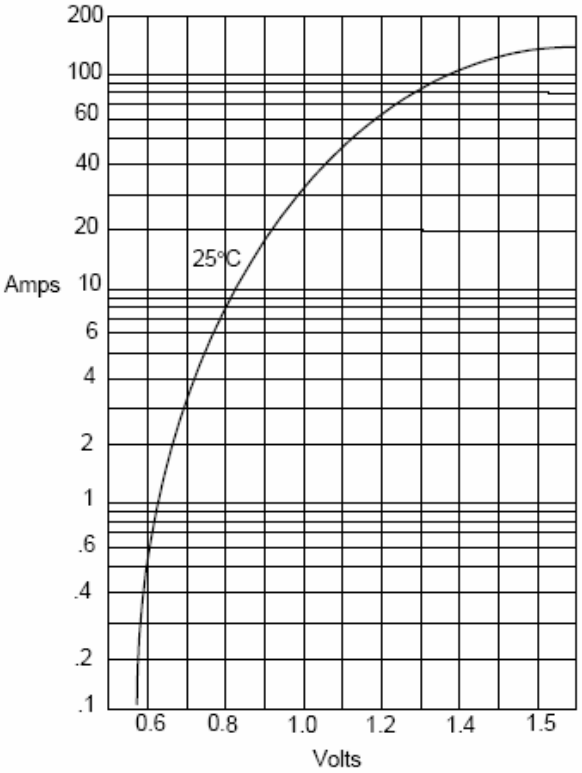
Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

Figure 3
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 4
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts