

[200509]

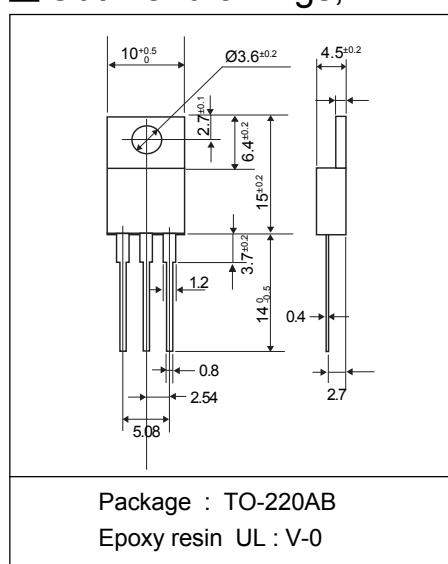
Low IR Schottky barrier diode

■ Features

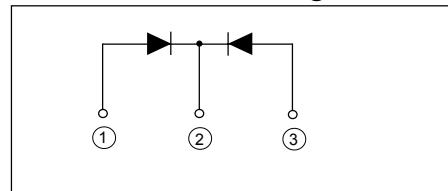
- Low IR
 - Low VF
 - Center tap connection

■ Applications

- High frequency operation
 - DC-DC converters
 - AC adapter



■ Connection diagram



■ Maximum ratings and characteristics

- Maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak surge reverse voltage	V_{RSM}	$tw=500\text{ns}, duty=1/40$	60	V
Repetitive peak reverse voltage	V_{RRM}		60	V
Isolating voltage	V_{iso}	Terminals-to-Case, AC.1min.	1500	V
Average output current	I_o	Square wave, duty=1/2 $T_c=119^\circ\text{C}$	30 *	A
Non-repetitive surge current	I_{FSM}	Sine wave 10ms	160	A
non-repetitive reverse surge power dissipation	PRM	$tw=10\mu\text{s}, T_j=25^\circ\text{C}$	750	W
Operating junction temperature	T_j		+150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Out put current of center tap full wave connection

- Electrical characteristics (at $T_a=25^\circ\text{C}$ Unless otherwise specified)

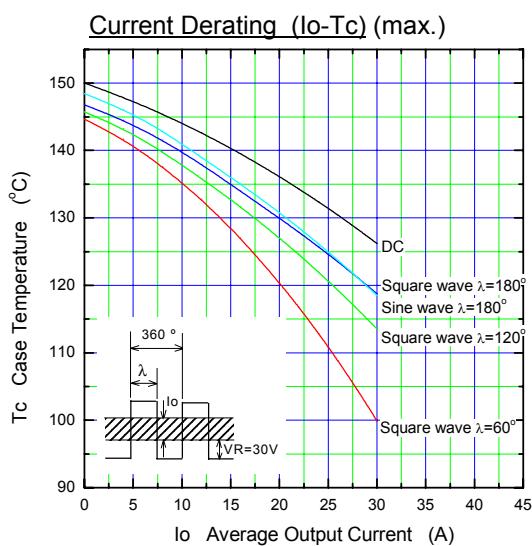
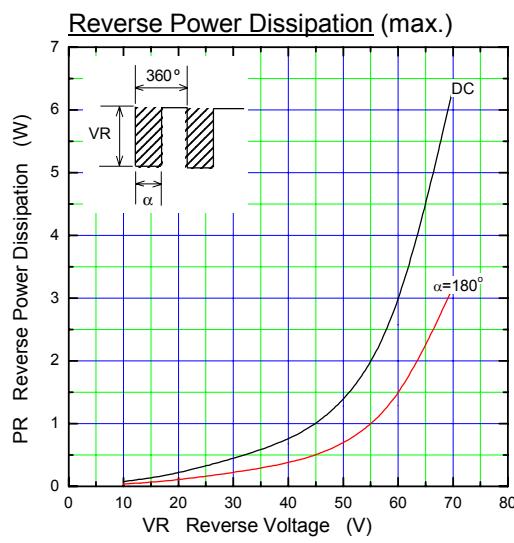
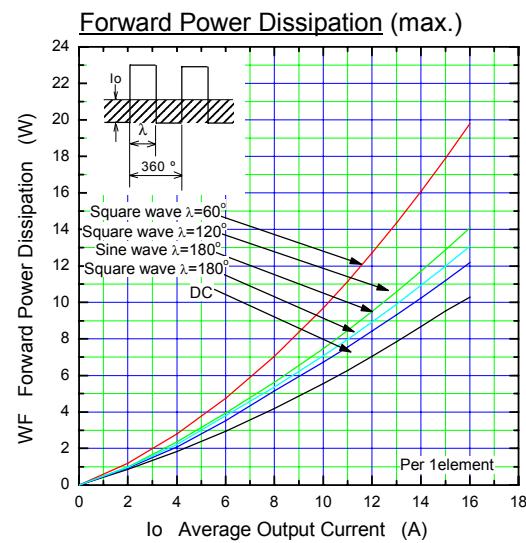
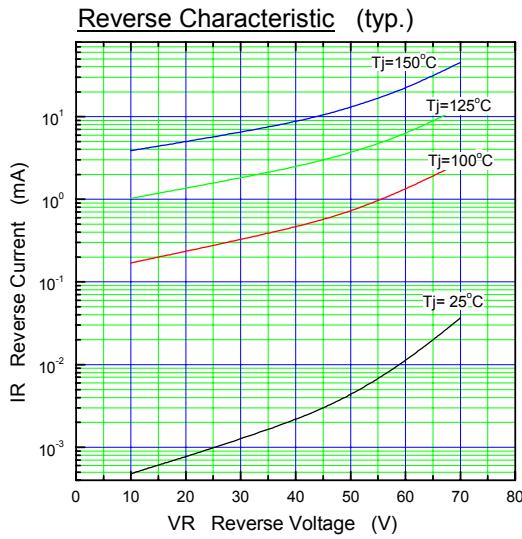
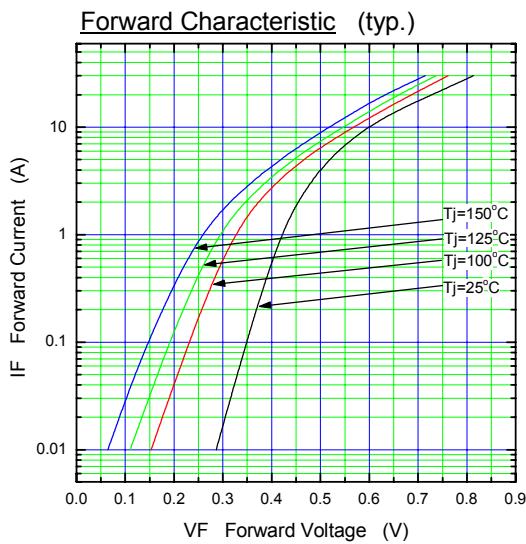
Item	Symbol	Conditions	Max.	Unit
Forward voltage **	V_F	$I_F=15A$	0.74	V
Reverse current **	I_R	$V_R=60V$	200	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case	1.25	$^{\circ}C/W$

**Rating per element

- Mechanical characteristics

Mounting torque	Recommended torque	0.3 to 0.5	N·m
Approximate mass		2	g

■ Characteristics



λ : Conduction angle of forward current for each rectifier element
Io: Output current of center-tap full wave connection

